

# DENON

For U.S.A., Canada, Europe  
& Korea model

**Ver. 1**

## SERVICE MANUAL

# MODEL DN-D4000

### DOUBLE CD PLAYER

#### 注 意

サービスをおこなう前に、このサービスマニュアルを必ずお読みください。本機は、火災、感電、けがなどに対する安全性を確保するために、さまざまな配慮をおこなっており、また法的には「電気用品安全法」にもとづき、所定の許可を得て製造されております。従ってサービスをおこなう際は、これらの安全性が維持されるよう、このサービスマニュアルに記載されている注意事項を必ずお守りください。

- 本機の仕様は性能改良のため、予告なく変更することがあります。
- 補修用性能部品の保有期間は、製造打切後8年です。

- Please use this service manual with referring to the operating instructions without fail.

- 修理の際は、必ず取扱説明書を参照の上、作業を行ってください。

- Some illustrations using in this service manual are slightly different from the actual set.

- 本文中に使用しているイラストは、説明の都合上現物と多少異なる場合があります。

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## SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

### LEAKAGE CURRENT CHECK

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is defective.

### LASER RADIATION

Do not stare into beam or view directly with optical instruments, class 3A laser product.

#### 注 意

サービス、点検時には次のことにご注意願います。

#### ●注意事項をお守りください！

サービスのとき特に注意を必要とする個所については、キャビネット、部品、シャーシなどにラベルや捺印で、注意事項を表示しています。これらの注意書きおよび取扱説明書などの注意事項を必ずお守りください。

#### ●感電に注意！

- (1) このセットは、交流電圧が印加されていますので、通電時に内部金属部に触れると感電することがあります。従って通電サービス時には、絶縁トランスの使用や手袋の着用、部品交換には、電源プラグを抜くなどして、感電にご注意ください。
- (2) 内部には、高電圧の部分がありますので、通電時の取扱には、十分ご注意ください。

#### ●指定部品の使用！

セットの部品は難燃性や耐電圧など安全上の特性を持ったものとなっています。従って交換部品は、使用されていたものと同じ特性の部品を使用してください。特に配線図、部品表に△印で指定されている安全上重要な部品は必ず指定のものをご使用ください。

#### ●部品の取付けや配線の引きまわしは、元どおりに！

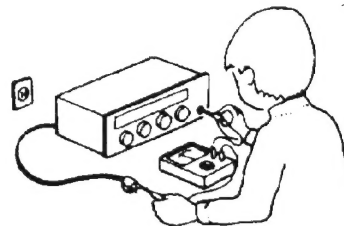
安全上、テープやチューブなどの絶縁材料を使用したり、プリント基板から浮かして取付けた部品があります。また内部配線は引きまわしやクランパーによって発熱部品や高圧部品に接近しないように配慮されていますので、これらは必ず元どおりにしてください。

#### ●サービス後は安全点検を！

サービスのために取り外したねじ、部品、配線などが元どおりにになっているか、またサービスした個所の周辺を劣化させてしまったところがないかなどを点検し、外部金属端子部と、電源プラグの刃の間の絶縁チェックをおこなうなど、安全性が確保されていることを確認してください。

#### (絶縁チェックの方法)

電源コンセントから電源プラグを抜き、アンテナや、プラグなどを外し、電源スイッチを入れます。500V絶縁抵抗計を用いて、電源プラグのそれぞれの端子と、外部露出金属部〔アンテナ端子、ヘッドホン端子、マイク端子、入力端子など〕との間で、絶縁抵抗値が1MΩ以上であること、この値以下のときは、セットの点検修理が必要です。



#### 注 意

安全上重要な部品について

本機に使用している多くの電気部品、および機構部品は安全上、特別な特性を持っています。この特性はほとんどの場合、外観では判別つきにくく、また、もとの部品より高い定格（定格電力、耐圧）を持ったものを使用しても安全性が維持されるとは、限りません。安全上の特性を持った部品は、このサービスマニュアルの配線図、部品表につぎのように表示していますので、必ず指定されている部品番号のものを使用願います。

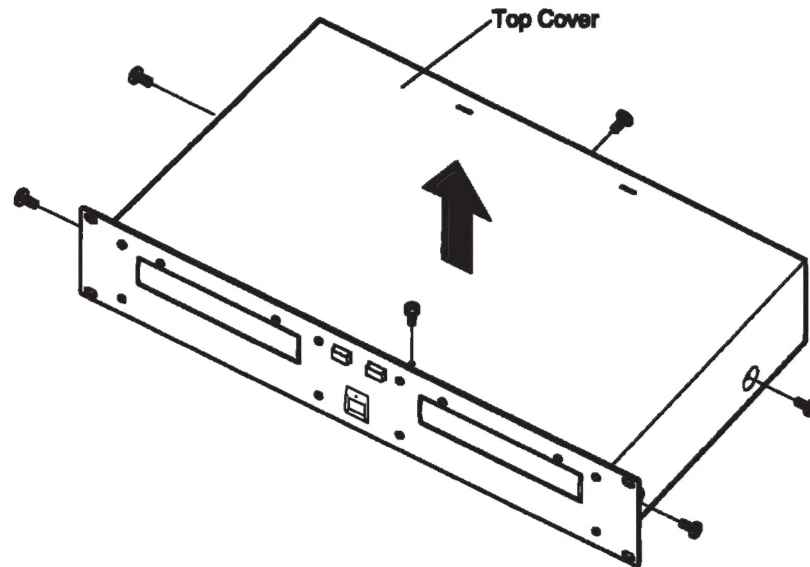
- (1) 配線図… △マークと黒色で薄く塗りつぶすことにより表示しています。
- (2) 部品表… △マークで表示しています。  
指定された部品と異なるものを使用した場合には、感電、火災などの危険を生じる恐れがあります。

## DISASSEMBLY

(Follow the procedure below in reverse order when reassembling)

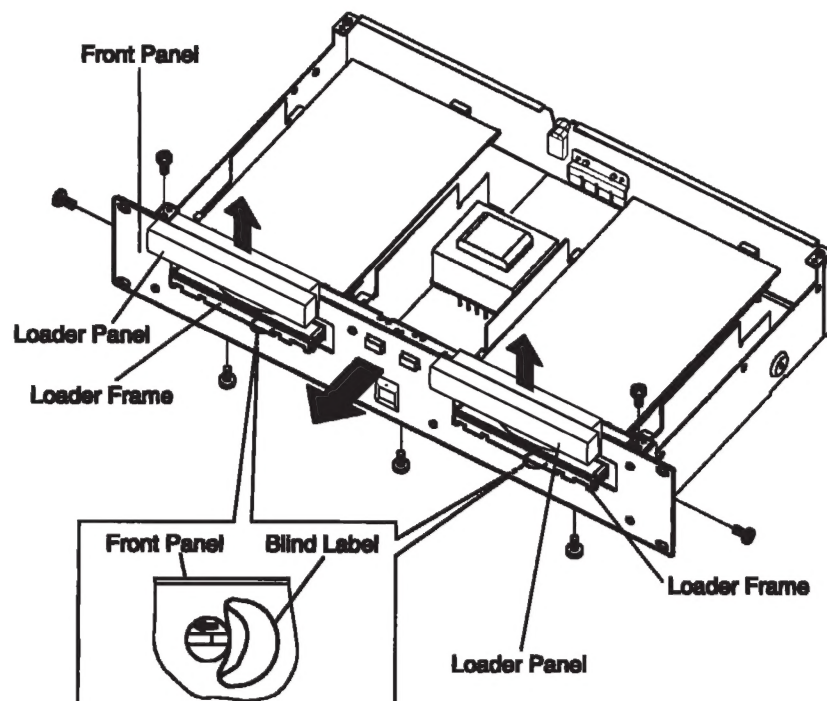
### 1. TOP COVER

- (1) Remove 4 screws on the both sides, and 1 screw on rear side, then remove 1 upper screw.
- (2) Pull up Top Cover.



### 2. FRONT PANEL

- (1) Detach 2 Blind Labels on the bottom chassis.
- (2) Move CD Mecha Rack in the arrow direction through the label detached chassis opening. Loader Frame comes out.
- (3) Pull up Loader Panel while pulling it towards front.
- (4) Remove 2 upper screws and 3 lower screws, and 2 screws on both sides.
- (5) Detach Front Panel.

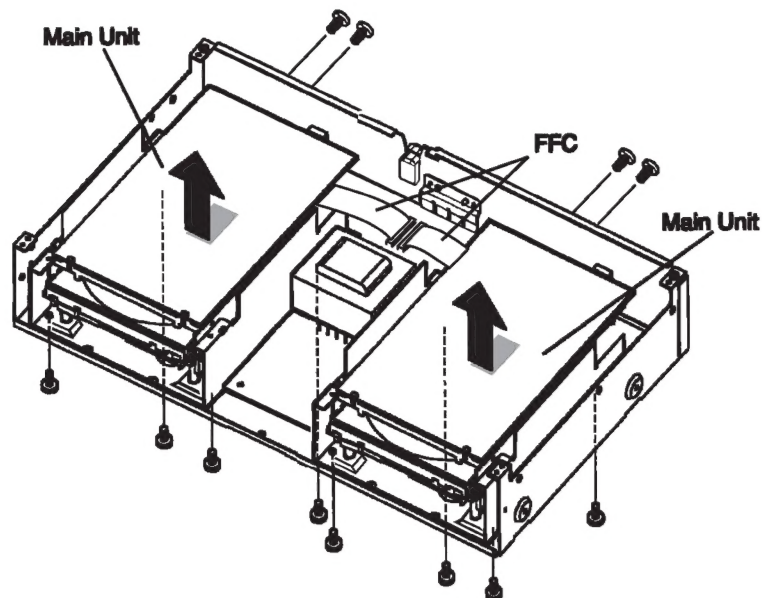


### 3. MECHANISM UNIT

- (1) Disconnect FFC cable.
- (2) Remove 8 lower screws
- (3) Remove 4 screws on rear side.

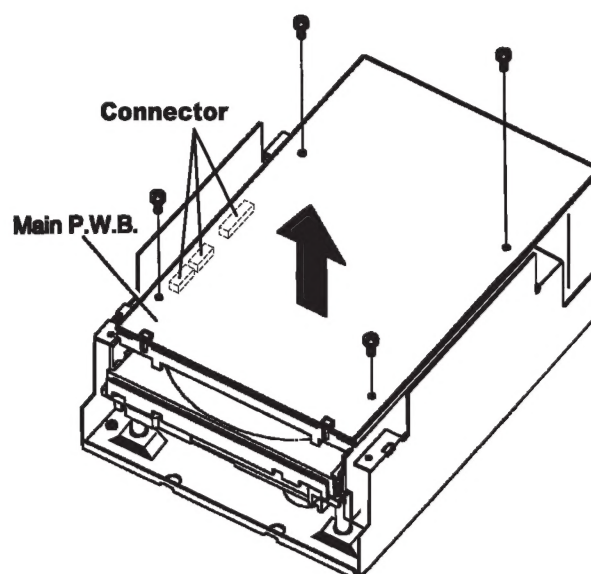
#### NOTES:

- (a) Do not pull out aslant to prevent the FFC cable from damage.
- (b) Do not fail to pull out AC cord from wall outlet before disconnecting the FFC cable. If the AC cord is remained plugged into wall outlet, the power is kept supplied in the unit, which may cause danger.



### 4. MAIN P.W.B.

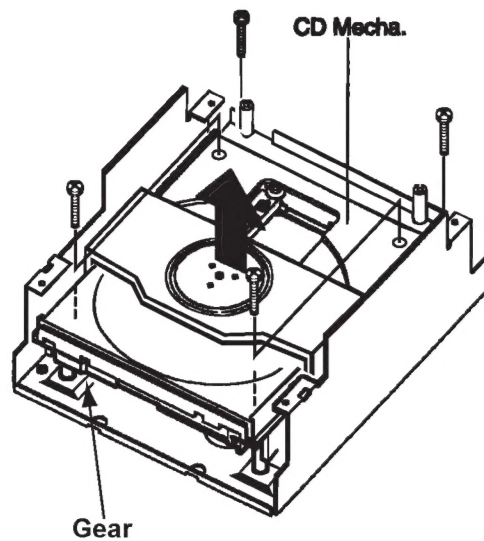
- (1) Remove 4 screws.
- (2) Disconnect Connector.
- (3) Detach Main P.W.B.





## 5. CD MECHA.

- (1) A gear is turned and a tray is opened.
- (2) Remove 4 upper screws.
- (3) Detach CD Mecha.

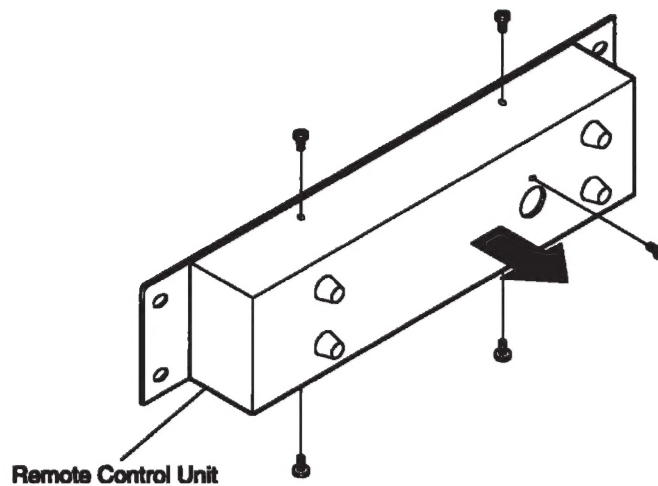


## 6. COVER ( REMOTE CONTROL UNIT )

- (1) Remove 5 screws.

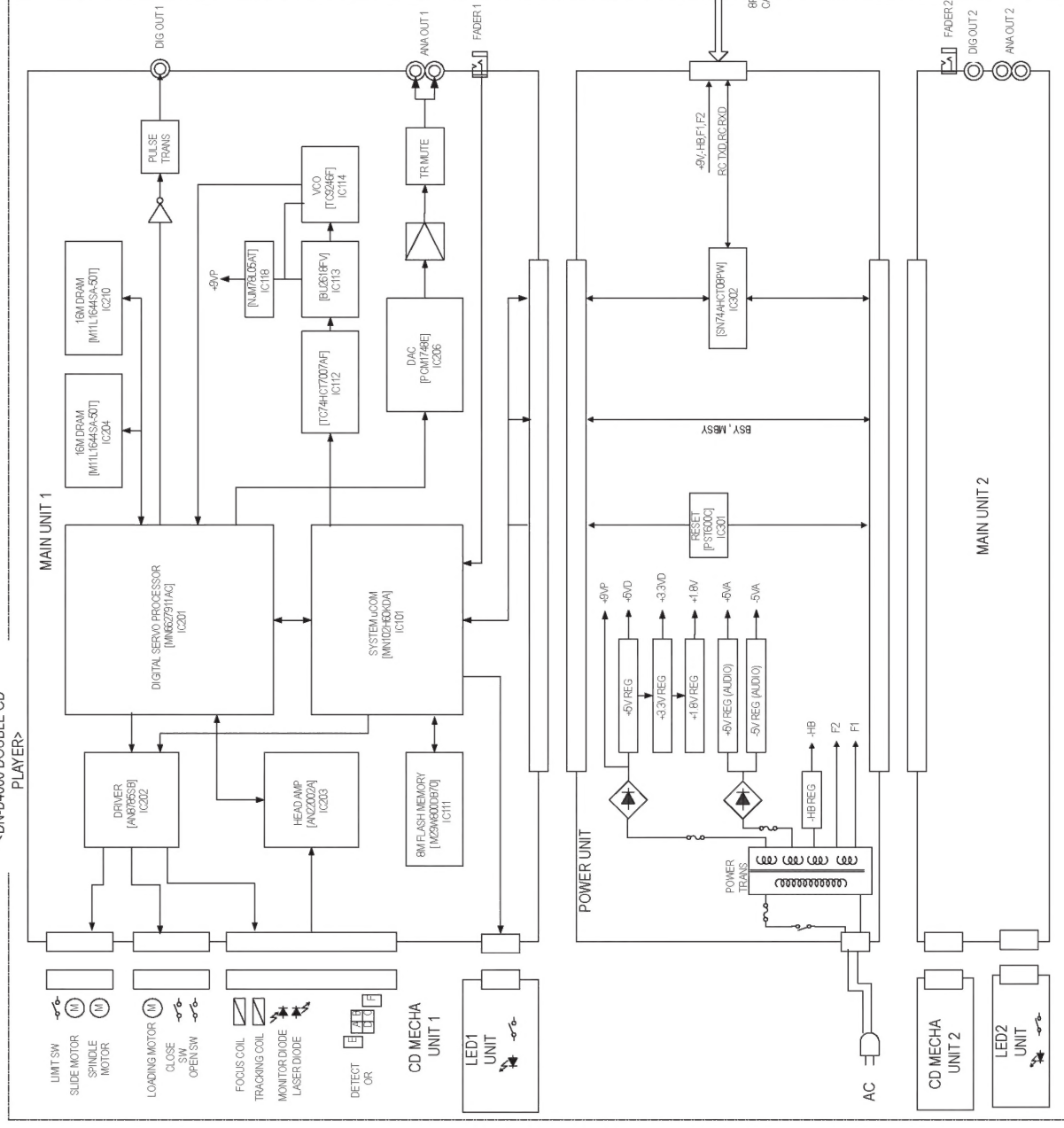
### NOTE:

- (a) Remote Control Unit and its back panel are connected with cables, so pay attention when removing the back panel.

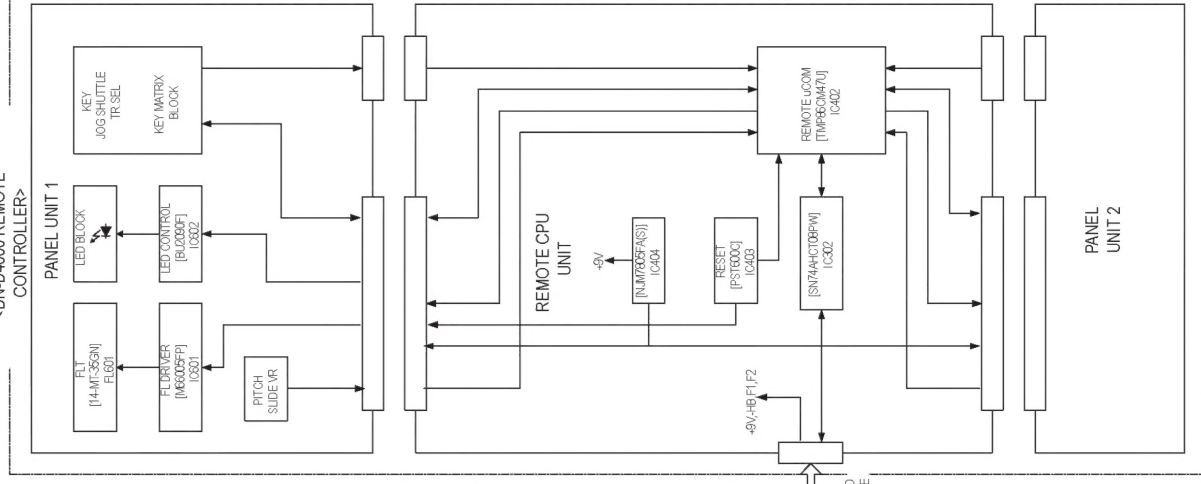


# BLOCK DIAGRAM

<DN-D4000 DOUBLE CD  
PLAYER>



<DN-D4000 REMOTE  
CONTROLLER>



# SERVICE PROGRAM

## Required Measuring Implement

1. Reference disc (TCD784 or CO-74176)

## 1. What is Service Program

Service program is a special program intended for confirming servo functions etc.

## 2. Contents of Service Program

Switch on the power while pushing the CD1's PITCH BEND + button and CD2's OPEN/CLOSE button at the same time. After actuating the servo program, select an aiming process number with the SELECT knob, A1 button, or A3 button. Press the SELECT knob to execute the selected process, the process number is then displayed on the track indicator of the display. To exit from the service program, just switch off the power.

	Function (Character-display)	Contents
SELECT knob	$\mu$ com Version check (Version No.)	Check Version with JOG dial. 1. System $\mu$ com version No.: "SysVerXXXX" 2. RC $\mu$ com version No.: "RC_VerXXXX"
	Error Code Check (Error Data)	Turn the JOG dial to display the logging error codes in the occurred order. "ErrXX_E ***" XX : occurred order E *** : error code 10 error logs are memorized at maximum. Kinds of Error Code, displayed Error Code Table Pressing SELECT knob enters to data erase mode. ("Err Clear?" is displayed.) If the SELECT knob is pushed again, the memorized error data are cleared.
	Total Running Time (Total_Time)	Total time span of servo function that counted by the hour is displayed. "R.Tim XXXXH"  Note: No time is counted if disc tray is opened within 59 minutes. Pressing SELECT knob enters to data erase mode. ("Time Clear?" is displayed.) If the SELECT knob is pushed again, the memorized time data are cleared.
	Automatic Servo Adjustment call	Starts automatic servo adjustment when the SELECT knob is pushed, and after completing the adjustment, sort of the used disc is indicated. Data is selectable with the JOG dial. "Servo_Data" 1. Focus gain data 2. Focus balance data 3. Focus offset data 4. Tracking gain data 5. Tracking balance data 6. Tracking offset data

	Function (Character-display)	Contents
SELECT knob	Block Error Rate Check	Loading a disc by OPEN/CLOSE button. Press the PLAY/PAUSE button. B.E.R. is displayed. "E.Rate_XXX XXX : Block Error Rate You can select the track by the JOG DIAL.
	Servo Check	Starts automatic servo checking when the SELECT knob is pushed. Loading a disc by OPEN/CLOSE button. "Lchk_Open" : Disc Tray is opened. "Lchk_Wait" : During check. "Lchk_OK!!" : Disc Tray is opened. "LchkErr ***" : Error(E ***) is occurred.
	Illumination Check	All illuminations are lit. All illuminations can be turned off to push the SELECT knob. Press the SELECT knob again, all illuminations can be lit.

Adjustment Item	Adjustment Value indication at character portions.
Focus Gain	0576 ~ 2304
Focus Balance	-050 ~ +050
Focus Offset	-005 ~ +005
Tracking Gain	0392 ~ 1569
Tracking Balance	-025 ~ +025
Tracking Offset	-005 ~ +005

\* Reference data.

### 3. TEST MODE

	Process No. (TRACK Indication)	Function (Character-display)	Contents
A1 button	-	Heat Run (H/R1Normal)	Starting with the PLAY/PAUSE button, it repeats open/close of the tray and playback. All tracks are played back if the track count is less than 20. Only the first and last tracks are played back if the tracks are more than 21. When any errors, it stops and indicates error code (see Error Code Table).
A2 button	-	Chucking Test (H/R2_Tray)	Starting with the PLAY/PAUSE button, it repeats open/close of the tray, servo on, and TOC read. The display shows the number of the tray operation. When any errors, it stops and indicates error code (see Error Code Table).

#### 4. Error Code Table

Error Code	CONTENTS
E001	Unable to close the loader tray in the regulation time.
E002	Unable to open the loader tray in the regulation time.
E003	Inner circle switch ON error even if the time is over.
E004	Inner circle switch OFF error even if the time is over.
E005	The focus offset adjustment result is outside the regulation range.
E006	Unable to adjust the focus offset in the regulation time.
E007	The tracking offset adjustment result is outside the regulation range.
E008	Unable to adjust the tracking offset in the regulation time.
E009	The FE peak is outside the regulation range.
E00A	The FE peak is outside the regulation range.
E00B	Unable to adjust the focus rough gain in the regulation time.
E00C	The focus rough gain is outside the regulation range.
E00D	Unable to actuate focus in the regulation time.
E00E	Unable to actuate tracking in the regulation time.
E00F	Unable to adjust the tracking rough gain in the regulation time.
E010	The tracking rough gain is outside the regulation range.
E011	Unable to adjust the tracking balance in the regulation time.
E012	The tracking balance adjustment result is outside the regulation range.
E013	Focus servo down during automatic adjustment.
E014	Focus servo down during automatic adjustment.
E015	Unable to adjust the focus balance in the regulation time.
E016	The focus balance adjustment result is outside the regulation range.
E017	Track servo down during automatic adjustment.
E018	Unable to adjust the focus fine gain in the regulation time.
E019	The focus fine gain is outside the regulation range.
E01A	Unable to adjust the tracking fine gain in the regulation time.
E01B	The tracking fine gain is outside the regulation range.
E01C	Unable to adjust automatically in the regulation time.
E01D	Unable to read the subcode Q in the regulation time.
E01E	Unable to read the TOC in the regulation time.
E01F	Focus servo down during search (over the regulation time).
E020	Track servo down during search (over the regulation time).
E0216 *	Servo error during search.
E0213 *	Search error (over the regulation time).
E022	Discontinuity occurred, during write to the DRAM.
E023	The error which cannot be corrected to the read data.
E024	Unable to do the level detect.
E025	Unable to join data in the regulation time.
E026	The error rate when recording on the memory is over the regulation value.
E027	The subcode jump more than regulation.
E028	Servo error when power is turned on.
E029	Subcode Q error.
E030	Inter face error for both drives.



## μCOM VERSION UPGRADE

System μcom can be upgraded in the following manner.

### Version Upgrade Method

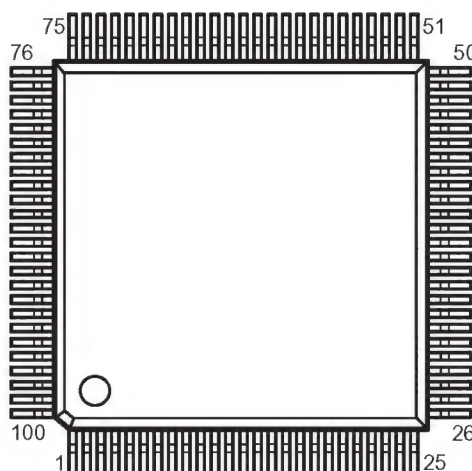
1. Record the version upgrade software on a CD-R or CD-RW disc, only as one file with the format ISO9660 Mode-1.  
The file name of the supplied version upgrade software should be used as is and this disc needs to finalize.
2. Hold the disc by the edges and place it on the disc tray.
3. Press the OPEN/CLOSE button to start the version upgrade.  
"Version Up" → "Push Play!" "xxxx->XXXX" are displayed.  
xxxx : current version  
XXXX : upgrade version
4. Press the PLAY/PAUSE button.  
"Now Writing" → "Writing-XXX" are displayed.  
XXX : count up from 000 to161
5. When the version upgrade is finished, "**Complete!**" is indicated.
6. Turn off the power once and turn on again.  
Press the OPEN/CLOSE button and remove the disc.

<b>NOTE:</b> When the power is turned off before " <b>Complete!</b> " is displayed, μcom version is not written correctly.
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# SEMICONDUCTORS

## • IC's

MN102H60KDA  
(IC101)



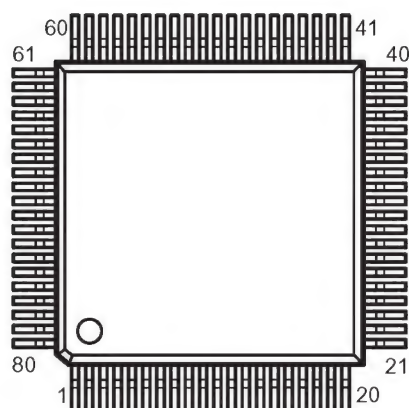
MN102H60KDA Terminal Function

Pin No.	Pin Name	Symbol	I/O	DET	Ext	Res	Ini	Function
1	P60, WAIT, SBT2	PCDMUTE	O	-	Pd	L	L	Mute for analog 'L': Mute ON
2	P61, _RE	RD-	O	-	Pu	H	-	Read signal
3	P62, _WEL	WR-	O	-	Pu	H	-	Write signal
4	P63, _WE, _WEH	Reserved	O	-	-	Hi-Z	L	Not used.
5	_CS0, TM13OA	FLASHROMCS-	O	-	Pu	H	-	Chip select signal (MASK ROM operation : Input port)
6	_CS1, TM13OB	Reserved	O	-	-	Hi-Z	L	Not used.
7	_CS2, TM14OA	Reserved	O	-	-	Hi-Z	L	Not used.
8	_CS3, TM14OB	PLOAD	O	-	-	Hi-Z	H	OPEN/CLOSE signal (PWM out put) (During Pnrst= 'L', out put PWM(50%))
9	P54, _BREQ	Reserved	O	-	-	Hi-Z	L	Not used.
10	P55, _BRACK	Reserved	O	-	-	Hi-Z	L	Not used.
11	P56, ALE, _ALE, _BSTRE, TM15IA	MON2	I	-	-	Hi-Z	-	Monitor signal 2
12	P57, _WORD	WORD-	I	-	L	L	-	Data bit bus width select 'L': 16bit
13	P20, A00, SBT2	A00	A/O	-	-	Unfix	-	Address bus
14	P21, A01, SBI2	A01	A/O	-	-	Unfix	-	Address bus
15	P22, A02, SBO2	A02	A/O	-	-	Unfix	-	Address bus
16	P23, A03	A03	A/O	-	-	Unfix	-	Address bus
17	Vdd	Vdd	-	-	-	-	-	Power supply(+3.3V)
18	BOSC, BIBT1, BIBT2, PB0	Reserved	O	-	-	L	L	Not used.
19	Vss	Vss	-	-	-	-	-	GND(0V)
20	XI, PB1	PCE	O	-	Pd	L	L	Latch output
21	XO	XO	-	-	-	-	-	Not used. OPEN
22	Vdd	Vdd	-	-	-	-	-	Power supply(+3.3V)
23	OSCI	OSCI	I	-	-	-	-	Not used.
24	OSCO	OSCO	O	-	-	-	-	OSCI output
25	MODE	MODE	I	-	L	L	-	Mode select 'L': Processor mode

Pin No.	Pin Name	Symbol	I/O	DET	Ext	Res	Ini	Function
26	P24,A04,TM15IA	A04	A/O	-	-	Unfix	-	Address bus
27	P25,A05	A05	A/O	-	-	Unfix	-	Address bus
28	P26,A06	A06	A/O	-	-	Unfix	-	Address bus
29	P27,A07	A07	A/O	-	-	Unfix	-	Address bus
30	P30,A08,_KI0	A08	A/O	-	-	Unfix	-	Address bus
31	P31,A09,_KI1	A09	A/O	-	-	Unfix	-	Address bus
32	P32,A10,_KI2	A10	A/O	-	-	Unfix	-	Address bus
33	P33,A11,_KI3	A11	A/O	-	-	Unfix	-	Address bus
34	AVDD	AVDD	-	-	-	-	-	Analog power supply terminal
35	P34,A12,_KI4	A12	A/O	-	-	Unfix	-	Address bus
36	P35,A13,_KI5	A13	A/O	-	-	Unfix	-	Address bus
37	P36,A14,_KI6	A14	A/O	-	-	Unfix	-	Address bus
38	P37,A15,_KI7	A15	A/O	-	-	Unfix	-	Address bus
39	P40,A16	A16	A/O	-	-	Unfix	-	Address bus
40	P41,A17	A17	A/O	-	-	Unfix	-	Address bus
41	P42,A18	A18	A/O	-	-	Unfix	-	Address bus
42	P43,A19	A19	A/O	-	-	Unfix	-	Address bus
43	Vref-	Vref-	-	-	-	-	-	Standard analog power supply
44	P44,AN4,A20	POPEN	I	-	-	Unfix	-	OPEN switch 'L': Switch ON
45	P45,AN5,A21	PCLOSE	I	-	-	Unfix	-	CLOSE switch 'L': Switch ON
46	P46,AN6,STOP,A22	PLIMITSW	I	-	-	Hi-Z	-	Inner circle SW 'L': Switch ON
47	P47,AN7,WDOOT, A23	PCDSEL	I	-	H/L	H/L	-	CD mecha select switch 'L': Mecha 1 / 'H': Mecha 2
48	P80,TM14OA	PEJECTSW	I	-	Pu	H	-	Eject switch 'L': Switch ON
49	P81,TM14OB	PTLED	O	-	Pd	L	L	Toray LED 'H': Light 1 / 'L': Turn Off
50	P82,TM0IO,SBI2, SBT3,SCL3	PDMUTE	O	-	Pu	H	H	Mute for digital 'H': Mute ON
51	P83,TM4IO,SBI3	RxD	I	-	Pu	H	-	Serial port (Receive) (76.8kbps 5V -> 3.3V)
52	P84,TM7IO,SBO3, SDA3	TxD	O	-	Pu	H	H	Serial port (Transmission) (76.8kbps , Use ATC function)
53	P85,TM9IOA,SBO2, SBT4,SCL4	PMD	O	-	Pu	L	L	DAC(PCM1748) control signal : Data
54	Vref+	Vref+	-	-	-	-	-	Standard analog power supply
55	P86,TM9IOB,SBI4	PMECHRxD	I	-	-	Hi-Z	-	Serial port (Receive)
56	P87,TM9IC,SBO4, SDA4	PMECHTxD	O	-	-	Hi-Z	H	Serial port (Transmission) (76.8kbps , Use ATC function)
57	P90,TM8IOA,BIBT1, _DMAREQ1	PMC	O	-	Pd	L	L	DAC(PCM1748) control signal : Clock
58	P91,TM10IOA, BIBT2,_DMAACK1	PML	O	-	Pd	L	L	DAC(PCM1748) control signal : Latch
59	P92,TM10IOB, _DMAREQ0	PLRCK	I	Ed	-	Hi-Z	-	LRCK : Use for time code creation during MP3 playback.
60	P93,TM10IC, _DMAACK0	PNRST	O	-	Pd	L	L	Round IC reset signal
61	Vss	Vss	-	-	-	-	-	GND(0V)
62	P94,AN0	PMBSYOUT	O	-	-	Hi-Z	H	Mechanism microcomputer Communication Busy signal output 'H':BUSY
63	P95,AN1	PMBSYIN	I	-	-	Hi-Z	-	Mechanism microcomputer Communication Busy signal input
64	P96,AN2	PRCBSYOUT	O	-	-	Hi-Z	H	Communication Busy signal output between RC and Mecha 'H':BUSY

Pin No.	Pin Name	Symbol	I/O	DET	Ext	Res	Ini	Function
65	P97,AN3	PRCBSYIN	I	-	-	Hi-Z	-	Communication Busy signal input between RC and Mecha
66	Vdd	Vdd	-	-	-	-	-	Power supply(+3.3V)
67	P70,SBT0,_RAS	PMCLK	O	-	-	Hi-Z	H	DSP interface Clock (clock synchronous formula)
68	P71,SBI0,_CAS,_LCAS	PSTAT	I	-	-	Hi-Z	-	DSP interface Reception (clock synchronous formula)
69	P72,SBO0,_UCAS	PMDAT	O	-	-	Hi-Z	H	DSP interface Transmission (clock synchronous formula)
70	P73,SBT1,DUMX	PTXTCLK	O	-	-	Hi-Z	H	Use during CD-TEXT data read (clock synchronous formula)
71	P74,SBI1	PTXTD	I	-	-	Hi-Z	-	Use during CD-TEXT data read (clock synchronous formula)
72	P75,SBO1	PMLD	O	-	-	Hi-Z	H	DSP interface latch
73	TEST1	TEST1	I	-	Pu	-	-	Pull up 33 - 50K
74	TEST2	TEST2	I	-	Pu	-	-	Pull up 33 - 50K
75	_NMI	_NMI	I	Lv	Pu	H	-	Need to pull up
76	PA0,_IRQ0	PBLKCK	I	Ed	-	Hi-Z	-	Sub code clock interruption
77	PA1,_IRQ1	PDQSY	I	Ed	-	Hi-Z	-	CD-TEXT DQSY Interruption
78	PA2,_IRQ2	PFADECUE	I	-	Pu	H	-	Fader signal input (CUE) 'L': Input YES
79	PA3,_IRQ3	PFADER ST	I	-	Pu	H	-	Fader signal input (PLAY) 'L': Input YES
80	PA4,_IRQ4,TM15IB	PCHGOFT	O	-	Pu	H	L	Off track signal
81	PA5,ADSEP	ADSEP	I	-	H	H	H	H': Address data separation mode / 'L': Address data common mode
82	_RST	RST-	I	Lv	-	L	-	Reset signal 'L': RESET
83	Vdd	Vdd	-	-	-	-	-	Power supply(+3.3V)
84	P00,D00,AD00	D00	D/O	-	-	Hi-Z	-	Data bus
85	P01,D01,AD01	D01	D/O	-	-	Hi-Z	-	Data bus
86	P02,D02,AD02	D02	D/O	-	-	Hi-Z	-	Data bus
87	P03,D03,AD03	D03	D/O	-	-	Hi-Z	-	Data bus
88	P04,D04,AD04	D04	D/O	-	-	Hi-Z	-	Data bus
89	P05,D05,AD05	D05	D/O	-	-	Hi-Z	-	Data bus
90	P06,D06,AD06	D06	D/O	-	-	Hi-Z	-	Data bus
91	P07,D07,AD07	D07	D/O	-	-	Hi-Z	-	Data bus
92	Vss	Vss	-	-	-	-	-	GND(0V)
93	P010,D08,AD08,TM8IOB	D08	D/O	-	-	Hi-Z	-	Data bus
94	P011,D09,AD09,TM8IC	D09	D/O	-	-	Hi-Z	-	Data bus
95	P012,D10,AD10,TM11IOA	D10	D/O	-	-	Hi-Z	-	Data bus
96	P013,D11,AD11,TM11IOB	D11	D/O	-	-	Hi-Z	-	Data bus
97	P014,D12,AD12,TM11IC	D12	D/O	-	-	Hi-Z	-	Data bus
98	P015,D13,AD13,TM12IOA	D13	D/O	-	-	Hi-Z	-	Data bus
99	P016,D14,AD14,TM12IOB	D14	D/O	-	-	Hi-Z	-	Data bus
100	P017,D15,AD15,TM12IC	D15	D/O	-	-	Hi-Z	-	Data bus

**MN6627911AC**  
(IC201)



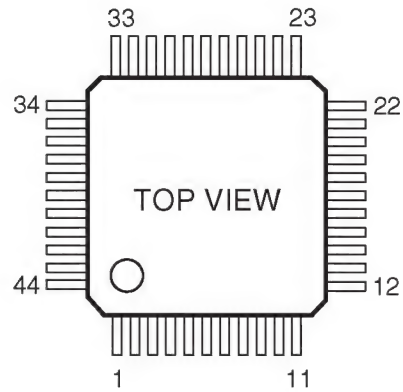
MN6627911AC Terminal Function

Pin No.	Pin Name	I/O	Function
1	DRVDD	I	Power supply for DRAM interface (Pin No.2 - 18, 80)
2	D0	I/O	Data I/O signal 0 for DRAM
3	D1	I/O	Data I/O signal 1 for DRAM
4	WE	O	Write enable signal for DRAM
5	RAS	O	RAS control signal for DRAM
6	D2	I/O	Data I/O signal 2 for DRAM
7	D3	I/O	Data I/O signal 3 for DRAM
8	CAS	O	CAS control signal 0 for DRAM
9	A10	O	Address signal 10 for DRAM
10	A8	O	Address signal 8 for DRAM
11	A7	O	Address signal 7 for DRAM
12	A6	O	Address signal 6 for DRAM
13	A5	O	Address signal 5 for DRAM
14	A4	O	Address signal 4 for DRAM
15	A9	O	Address signal 9 for DRAM
16	A0	O	Address signal 0 for DRAM
17	A1	O	Address signal 1 for DRAM
18	A2	O	Address signal 2 for DRAM
19	A3	O	Address signal 3 for DRAM
20	DVSS2	I	GND for digital
21	DVDD2	I	Power supply for digital
22	SPOUT	O	Spindle motor drive signal
23	TRVP	O	Traverse drive signal
24	TRVM	O	Not used
25	TRP	O	Tracking drive
26	GCNTL	O	Gain control signal for CD-RW
27	FOP	O	Focus drive
28	CHGICO	O	EQ select signal
29	IOVDD1	I	Power supply for IO
30	TBAL	O	Tracking balance adjust
31	FBAL	O	Focus balance adjust
32	FE	I	Focus error signal (Analog input)
33	TE	I	Tracking error signal (Analog input)
34	RFENV	I	RF envelope signal (Analog input)
35	OFT	I	Off track signal     H : OFF TRACK
36	NRFDET	I	RF detect signal     H : DETECT
37	BDO	I	Drop out signal     H : DROP OUT
38	LDON	O	Laser ON signal     H : ON
39	ARF	I	RF signal
40	IREF	I	Standard current input terminal
41	ADPVCC	I	Voltage for power supply monitor



Pin No.	Pin Name	I/O	Function
42	DSLIF	O	Loop filter for DSL
43	RFSW	I	Loop filter for DSL
44	PLLIF	O	Loop filter for PLL
45	PLLFO	O	Loop filter for PLL
46	AVDD2	I	Power supply for analog (DSL, PLL, AD)
47	AVSS2	I	GND for analog (DSL, PLL, AD)
48	OUTL	O	Not used
49	AVSS1	I	GND for analog (Audio output)
50	OUTR	O	Not used
51	AVDD1	I	Power supply for analog (Audio output)
52	DVSS3	I	GND for digital
53	DVDD3	I	Power supply for digital
54	TMOD2	I	Test terminal L : Normal
55	MON2	O	Serial monitor signal 2
56	BCLK	O	Bit clock for serial data
57	SRDATA	O	Serial data signal
58	LRCK	O	L, R discernment signal
59	IOVDD2	I	Power supply for IO
60	TX	O	Digital audio interface signal
61	MCLK	I	ucon command clock signal
62	MDATA	I	ucon command data signal
63	MLD	I	ucon command load signal L : LOAD
64	BLKCK	O	Sub code block clock signal (f=75Hz : Normal speed playback)
65	PWMSEL	I	PWM output mode select L : Direct H : 3 values
66	SMCK	O	Not used
67	SBCK	I	Not used
68	STAT	O	Status signal
69	NRST	I	Reset L : RESET
70	SPPOL	O	Not used
71	PMCK	O	Not used
72	DQSY	O	Pack signal for CD TEXT data
73	TXTD	O	CD TEXT data signal
74	TXTCK	O	Ext. clock signal input for CD TEXT resister
75	NTEST	I	Test terminal H : Normal
76	X2	O	Not used
77	X1	I	16.9344MHz input terminal
78	DVSS1	I	GND for digital
79	DVDD1	I	Power supply for digital
80	MON1	O	Serial monitor signal

# TMP86CM47U (RC: IC102, 202)

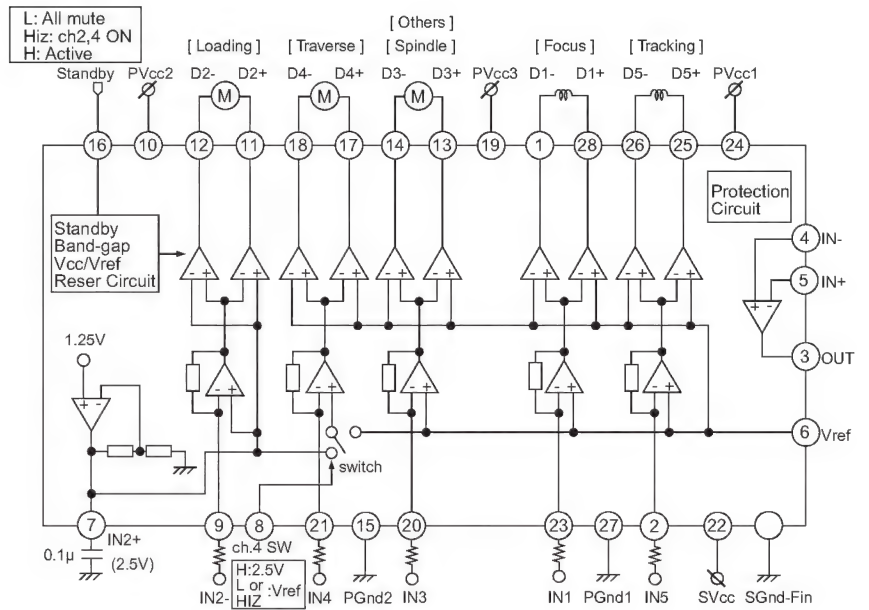
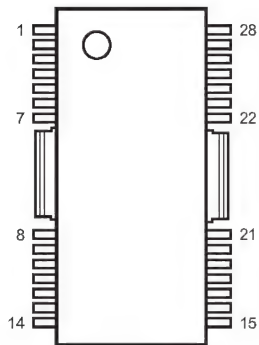


## TMP86CM47U Terminal Function

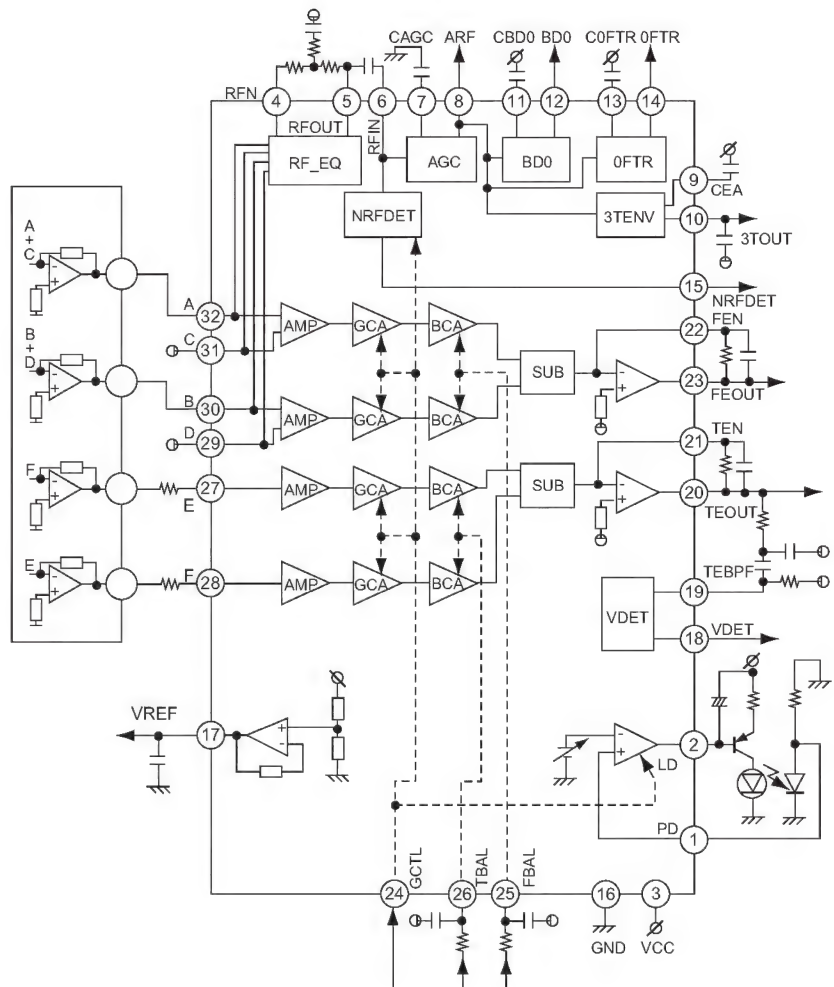
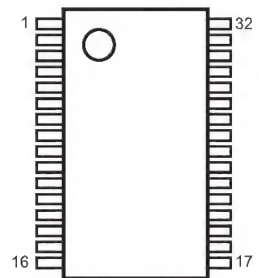
Pin No.	Pin Name	Symbol	I/O	DET	Ext	Res	Ini	Function
1	VSS	VSS	-	-	-	-	-	GND (0V)
2	XIN	XIN	I	-	-	-	-	Oscillation input
3	XOUT	XOUT	O	-	-	-	-	Oscillation output
4	TEST	TEST	I	-	-	-	-	Fixed to L
5	VDD	VDD	-	-	-	-	-	Power (+5.0V)
6	P21	LCLK1	O	-	Pu	H	L	CD1:BU2090F-CLK
7	P22	LCLK2	O	-	Pu	H	L	CD2:BU2090F-CLK
8	/RST	/RST	I	-	-	-	-	ucon reset
9	P20	/FLRST	O	-	Pd	H	L	CD1/2:M66005FP-/RST
10	P00	NC	I	-	-	Hi-Z	-	
11	P01	NC	I	-	-	Hi-Z	-	
12	RXD	RXD	I	-	-	H		Data receive from main unit
13	TXD	TXD	O	-	-	H	H	Data send to main unit
14	P04	DATA	O	-	Pu	H	H	CD1/2:M66005FP-DATA & BU2090F-DATA
15	P05	NC	I	-	-	Hi-Z	-	
16	P06	FLCLK	O	-	Pu	H	H	CD1/2:M66005FP-CLK
17	P07	NC	I	-	-	Hi-Z	-	
18	P17	/FLCS2	O	-	Pu	H	H	CD2:M66005FP-/CS
19	P16	/FLCS1	O	-	Pu	H	H	CD1:M66005FP-/CS
20	P15	/KEYOUT5	O	-	Pu	H	H	Key scan signal 5
21	P14	/KEYOUT4	O	-	Pu	H	H	Key scan signal 4
22	P13	/KEYOUT3	O	-	Pu	H	H	Key scan signal 3
23	P12	/KEYOUT2	O	-	Pu	H	H	Key scan signal 2
24	P11	/KEYOUT1	O	-	Pu	H	H	Key scan signal 1
25	P10	/KEYOUT0	O	-	Pu	H	H	Key scan signal 0
26	AIN0	PIT1	A/I	-	-	-	-	CD1: Pitch input
27	AIN1	PITC1	A/I	-	-	-	-	CD1: Pitch center value signal
28	AIN2	PIT2	A/I	-	-	-	-	CD2: Pitch input
29	AIN3	PITC2	A/I	-	-	-	-	CD2: Pitch center value signal
30	P34	JOG10	I	-	Pu	-	H	CD1: JOG
31	P35	JOG11	I	-	Pu	-	H	CD1: JOG
32	P36	JOG20	I	-	Pu	-	H	CD2: JOG
33	P37	JOG21	I	-	Pu	-	H	CD2: JOG

Pin No.	Pin Name	Symbol	I/O	DET	Ext	Res	Ini	Function
34	VAREF	5V	I	-	-	-	-	Power (+5.0V), Analog ref.V for A/D conversion
35	AVDD	5V	I	-	-	-	-	Power (+5.0V), for A/D conversion circuit only
36	AVSS	0V	I	-	-	-	-	GND (0V), Analog GND for A/D conversion
37	P40	/KEYIN0	I	-	Pu	-	H	CD1: Key scan input 0
38	P41	/KEYIN1	I	-	Pu	-	H	CD1: Key scan input 1
39	P42	/KEYIN2	I	-	Pu	-	H	CD1: Key scan input 2
40	P43	/KEYIN3	I	-	Pu	-	H	CD1: Key scan input 3
41	P44	/KEYIN4	I	-	Pu	-	H	CD2: Key scan input 0
42	P45	/KEYIN5	I	-	Pu	-	H	CD2: Key scan input 2
43	P46	/KEYIN6	I	-	Pu	-	H	CD2: Key scan input 3
44	P47	/KEYIN7	I	-	Pu	-	H	CD2: Key scan input 3

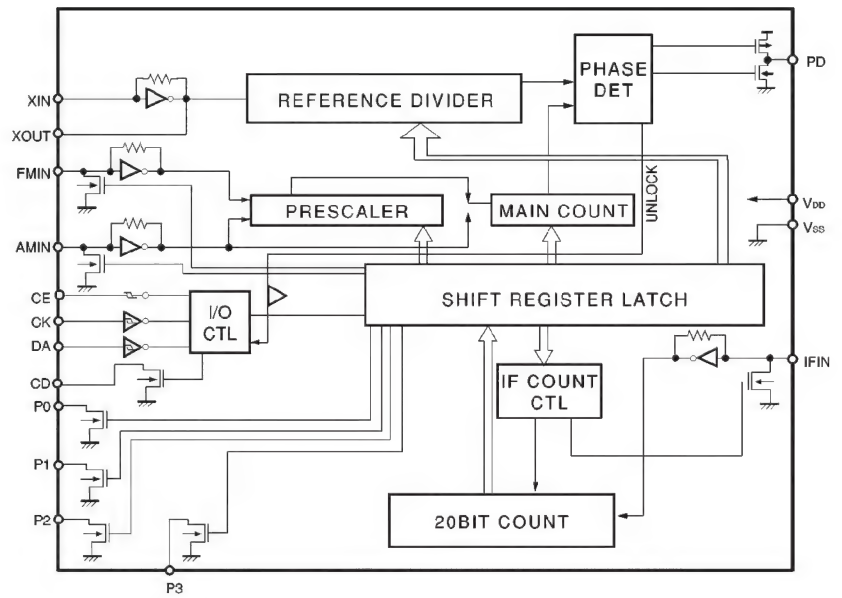
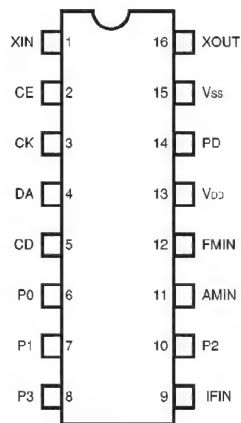
# AN8785SB (IC202)



# AN22002A (IC203)

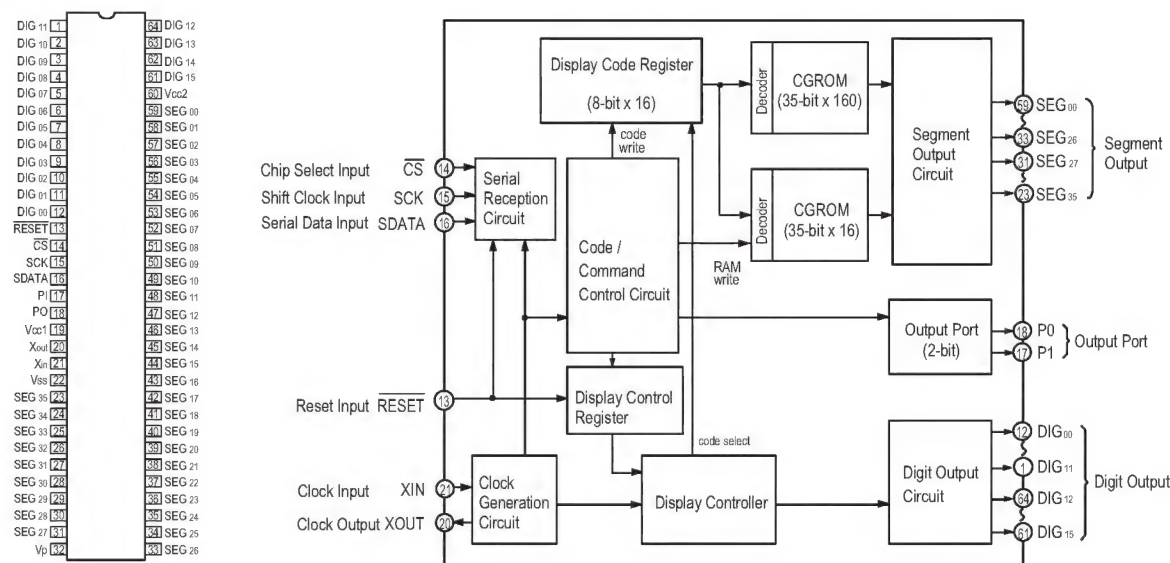


# BU2618FV (IC113)





M66005FP (IC601)



M66005FP Terminal Function

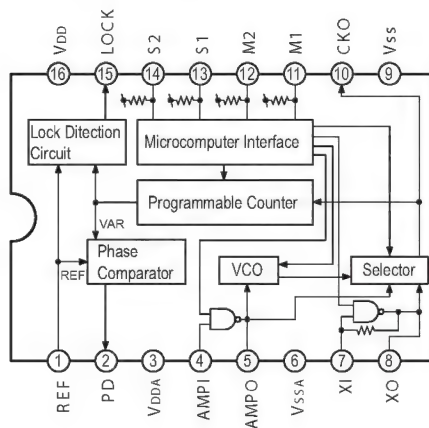
Symbol	Name	Function
RESET	Reset Input	Initializes internal state of M66005.
CS	Chip Select Input	Able to communicate with MCU in "L" mode. Command from MCU will be disregarded in "H" mode.
SCK	Shift Clock Input	Shifts input data at rise from "L" to "H".
SDATA	Serial Data Input	Inputs character code or command data needed to display from MSB.
XIN	Clock Input	Sets oscillation frequency by connecting external resistor and capacitor (maximum oscillation frequency fosc (max)=1MHz). Also feasible to apply external clock. In this case, inject external clock to Xin terminal and open Xout terminal.
XOUT	Clock Output	
DIG 00~DIG 15	Digit Output	Connect to digit terminal of VFD. DIG00~DIG15 correspond to the 1st figure to 16th figure respectively.
SEG 00~SEG 35	Segment Output	Connect to segment terminal of VFD. For corresponding SEG00~SEG35 to segment terminal of VFD, refer to the figure right.
P0, P1		Output port (static operation).
VCC1		Positive power supply terminal for internal logic.
VCC2		Positive power supply terminal for high tension output port.
Vss		GND terminal.
Vp		Negative power supply terminal for VFD drive.

(Forwarding connection of segment output terminal.)

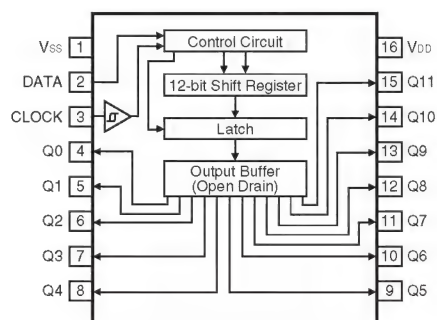
□ in the right figure indicates 1 dot of segment, the figure in □ shows the segment output terminal number (00~35) to be connected.

00	01	02	03	04
05	06	07	08	09
10	11	12	13	14
15	16	17	18	19
20	21	22	23	24
25	26	27	28	29
30	31	32	33	34
35				

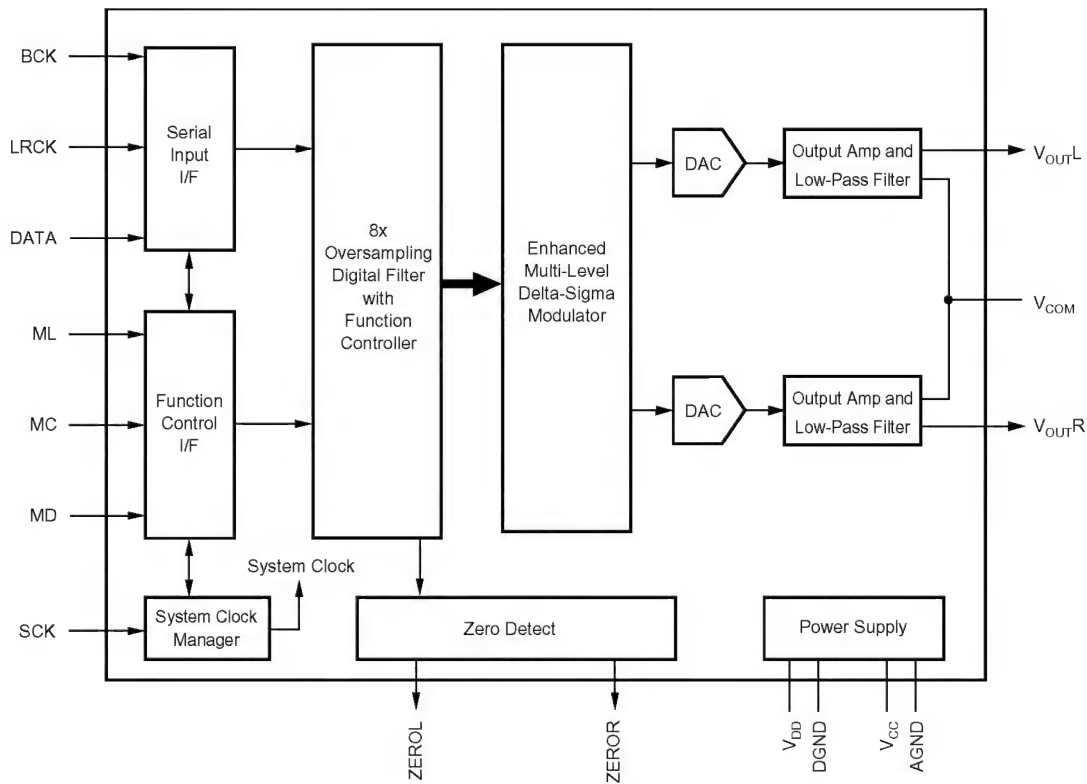
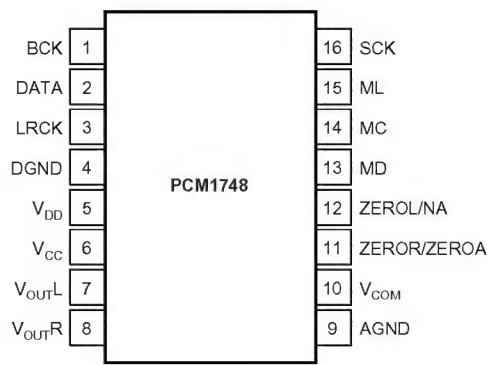
### TC9246F (IC114)



### BU2090F (IC602)



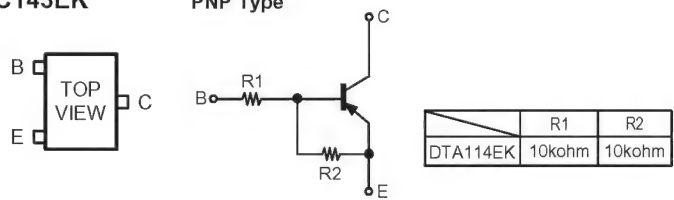
PCM1748 (IC206)



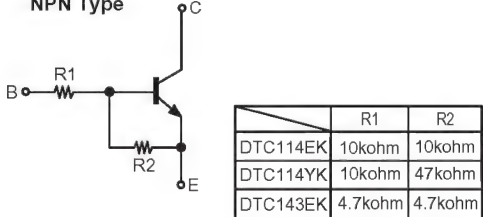
● TRANSISTORS

DTA114EK  
DTC114EK  
DTC114YK  
DTC143EK

DTA114EK  
PNP Type







DTC114EK  
DTC114YK  
DTC143EK  
NPN Type



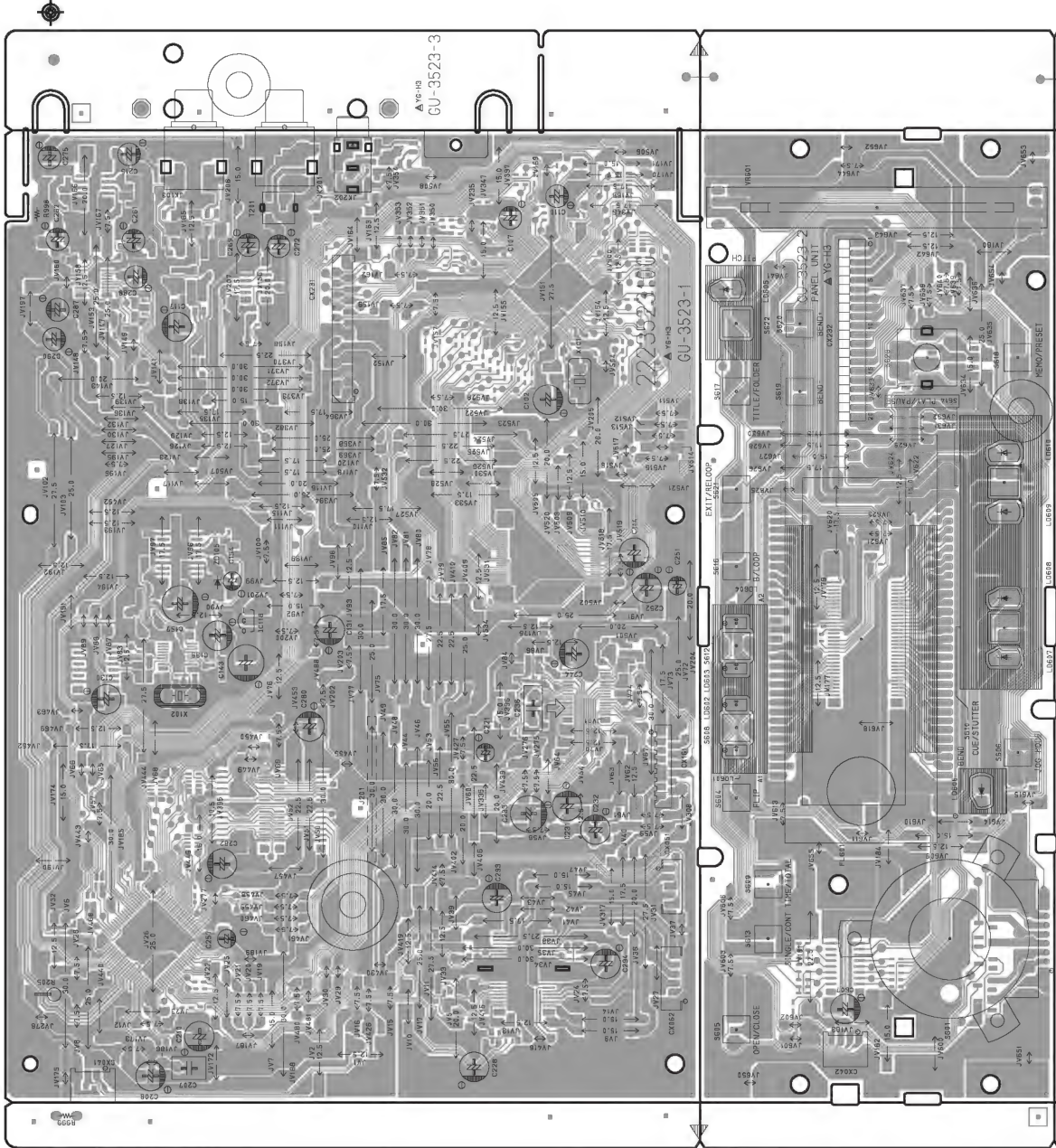


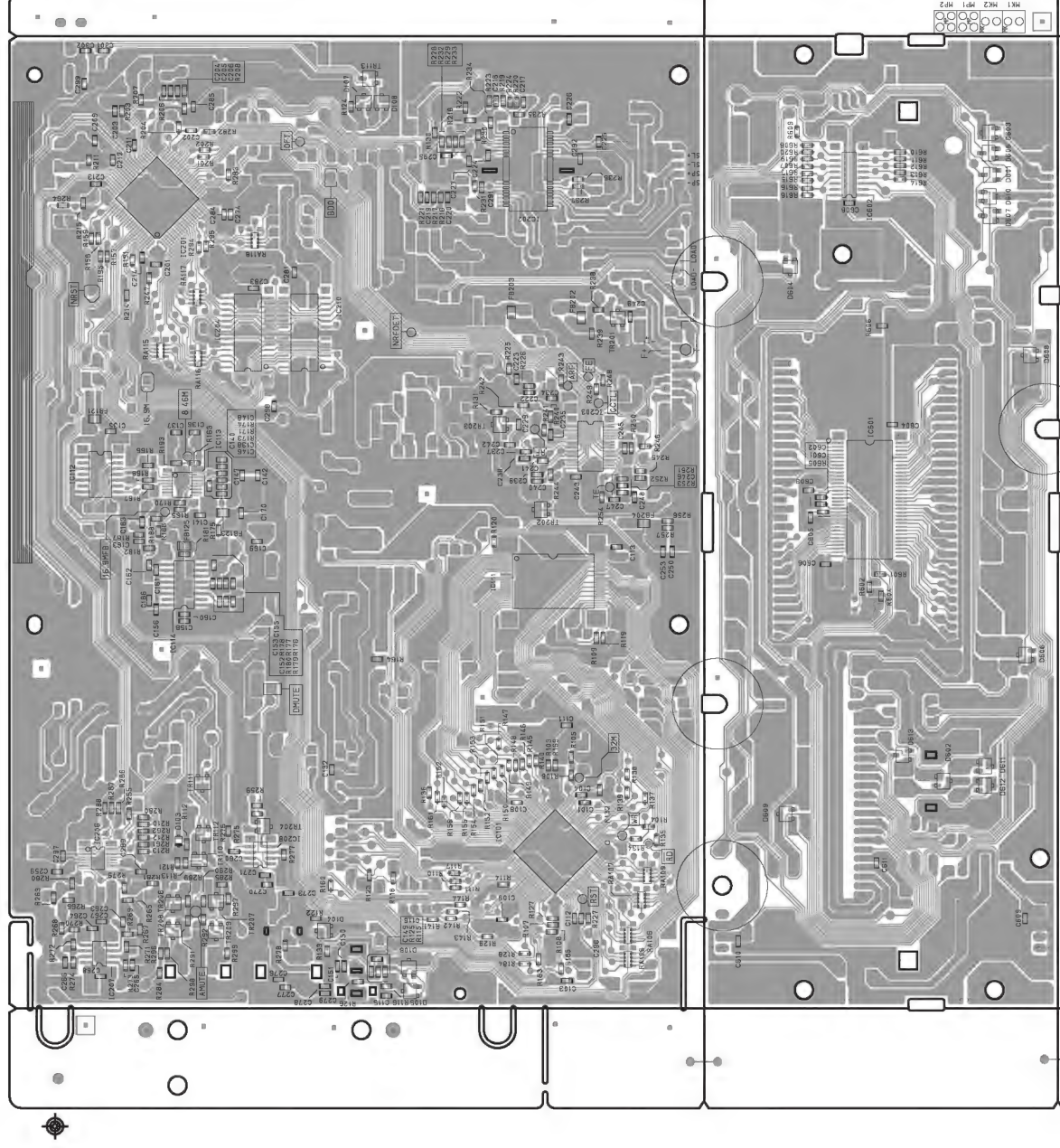
Anode Connection

	14G	13G	12G	11G	10G~1G
P1	S1	1d	1d	1d	1-1
P2	S2	1e	1e	1e	2-1
P3	S3	1c	1c	1c	3-1
P4	1d	1g	1g	1g	4-1
P5	1e	1f	1f	1f	5-1
P6	1c	1b	1b	1b	1-2
P7	1g	1a	1a	1a	2-2
P8	1f	2d	2d	2d	3-2
P9	1b	2e	2e	2e	4-2
P10	1a	2c	2c	2c	5-2
P11	Dp	2g	2g	2g	1-3
P12	2d	2f	2f	2f	2-3
P13	2e	2b	2b	2b	3-3
P14	2c	2a	2a	2a	4-3
P15	2g			<b>MEMO</b>	5-3
P16	2f	S2	<b>PLAY LIST</b>	<b>MP3</b>	1-4
P17	2b	3d	<b>T.</b>		2-4
P18	2a	3e	<b>REMAIN</b>	<b>D.OUT</b>	3-4
P19	<b>ARTIST</b>	3c	-	<b>A1</b>	4-4
P20	<b>ALBUM</b>	3g	-	S4	5-4
P21	<b>REPEAT</b>	3f	-	<b>B</b>	1-5
P22	<b>LOCK</b>	3b	-	S3	2-5
P23	-	3a	-	<b>A2</b>	3-5
P24	-	4d	-	S2	4-5
P25	-	4e	-	<b>B</b>	5-5
P26	-	4c	-	S1	1-6
P27	-	4g	-	-	2-6
P28	-	4f	-	-	3-6
P29	-	4b	-	-	4-6
P30	-	4a	-	-	5-6
P31	-	S1	-	-	1-7
P32	-		-	-	2-7
P33	-	<b>FILE</b>	-	-	3-7
P34	-	<b>FOLDER</b>	-	-	4-7
P35	-	<b>TITLE</b>	-	-	5-7
P36	-	<b>ELAPSED</b>	-	-	S1
P37	-	<b>CONT.</b>	-	-	S2
P38	-	<b>SINGLE</b>	-	-	S3



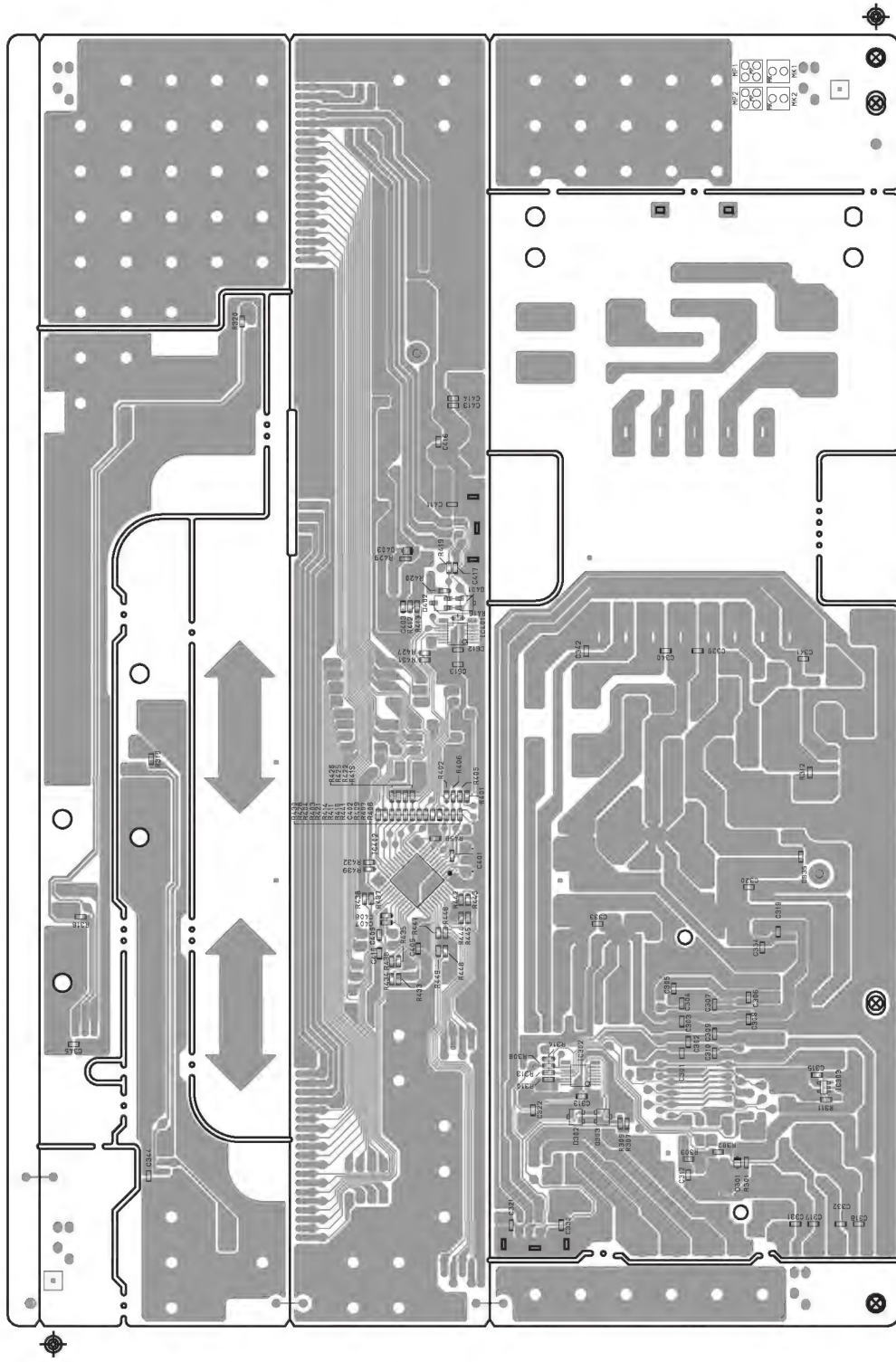
PRINTED WIRING BOARDS  
GU-3523 DRIVE P.W.B. UNIT











## NOTE FOR PARTS LIST

- Part indicated with the mark "⊗" are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.
- When ordering of part, clearly indicate "1" and "I" (i) to avoid mis-supplying.
- Ordering part without stating its part number can not be supplied.
- Part indicated with the mark "★" is not illustrated in the exploded view.
- └ Not including Carbon Film  $\pm 5\%$ , 1/4W Type in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)

### WARNING:

Parts marked with this symbol  $\triangle$  have critical characteristics.  
Use ONLY replacement parts recommended by the manufacturer.

### ● Resistors

Ex.: RN 14K 2E 182 G FR  
Type Shape Power Resist- Allowable Others  
and- ance error

RD : Carbon	2B : 1/8W	F : $\pm 1\%$	P : Pulse-resistant type
RC : Composition	2E : 1/4W	G : $\pm 2\%$	NL : Low noise type
RS : Metal oxide film	2H : 1/2W	J : $\pm 5\%$	NB : Non-burning type
RW : Winding	3A : 1W	K : $\pm 10\%$	FR : Fuse-resistor
RN : Metal film	3D : 2W	M : $\pm 20\%$	F : Lead wire forming
RK : Metal mixture	3F : 3W		
	3H : 5W		

#### \* Resistance

1 8 2  $\Rightarrow$  1800 ohm = 1.8 kohm  
Indicates number of zeros after effective number.  
2-digit effective number.

- Units: ohm

1 R 2  $\Rightarrow$  1.2 ohm  
1-digit effective number.  
2-digit effective number, decimal point indicated by R.

- Units: ohm

### ● Capacitors

Ex.: CE 04W 1H 2R2 M BP  
Type Shape Dielectric Capacity Allowable Others  
and- strength error

CE : Aluminum foil electrolytic	0J : 6.3V	F : $\pm 1\%$	HS : High stability type
CA : Aluminum solid electrolytic	1A : 10V	G : $\pm 2\%$	BP : Non-polar type
CS : Tantalum electrolytic	1C : 16V	J : $\pm 5\%$	HR : Ripple-resistant type
CQ : Film	1E : 25V	K : $\pm 10\%$	DL : For charge and discharge
CK : Ceramic	1V : 35V	M : $\pm 20\%$	HF : For assuring high frequency
CC : Ceramic	1H : 50V	Z : $+80\%$	U : UL part
CP : Oil	2A : 100V	-20%	C : CSA part
CM : Mica	2B : 125V	P : $+100\%$	W : UL-CSA type
CF : Metallized	2C : 160V	-0%	F : Lead wire forming
CH : Metallized	2D : 200V	C : $\pm 0.25\text{pF}$	
	2E : 250V	D : $\pm 0.5\text{pF}$	
	2H : 500V	= : Others	
	2J : 630V		

#### \* Capacity (electrolyte only)

2 2 2  $\Rightarrow$  2200 $\mu\text{F}$   
Indicates number of zeros after effective number.  
2-digit effective number.

- Units:  $\mu\text{F}$ .

2 R 2  $\Rightarrow$  2.2 $\mu\text{F}$   
1-digit effective number.  
2-digit effective number, decimal point indicated by R.

- Units:  $\mu\text{F}$ .

#### \* Capacity (except electrolyte)

2 2 2  $\Rightarrow$  2200pF=0.0022 $\mu\text{F}$   
(More than 2) — Indicates number of zeros after effective number.  
2-digit effective number.

- Units: pF.

2 2 1  $\Rightarrow$  220pF  
(0 or 1) — Indicates number of zeros after effective number.  
2-digit effective number.

- Units: pF.

- When the dielectric strength is indicated in AC, "AC" is included after the dielectric strength value.

# PARTS LIST OF P.W.B. UNIT ASS'Y

.....  
.....  
.....

## GU-3523 DRIVE P.W.B. UNIT ASS'Y

	Ref. No.	Part No.	Part Name	Remarks	New
SEMICONDUCTORS GROUP					
	IC101 IC111 IC112	262 3171 000 GEN6411 262 2376 903	MN102H60KDA D4000 SYSTEM ROM TC74HCT7007AF(TP1)	8M FLASH	
	IC113 IC114 IC118 IC201 IC202	262 2651 903 262 1883 905 263 0432 907 262 3158 007 262 3159 909	BU2618FV(E2) TC9246F-TP1 NJM78L05AT MN6627911AC AN8785SB		
	IC203 IC204 IC206 IC207 IC208	262 3160 901 262 2881 003 262 3166 905 263 0615 902 262 1953 903	AN22002A 16M DRAM(3.3V) PCM1748E(TAPE) BA15218F-DXE2 TC7WU04F		
	IC210 IC601 IC602  TR110	262 2881 003 262 2951 904 262 2745 903  269 0082 902	16M DRAM(3.3V) M66005FP BU2090F(E2)  DTC114EKT96		
	TR112 TR113 TR201 TR202 TR204	269 0083 901 269 0048 904 272 0125 904 269 0144 905 273 0460 905	DTA114EKT96 DTC143EK-T96 2SB709A DTC114YK-T146 KTC2875B-RTK		
	TR206  D103 D104 D106	273 0460 905  276 0717 903 276 0438 949 276 0559 909	KTC2875B-RTK  1SS355 TE-17 MA151WK (TAPE) DAP202KT146		
	D107 D108 D601  ZD105	276 0438 949 276 0559 909 276 0559 909  276 0450 901	MA151WK (TAPE) DAP202KT146 DAP202KT146  HZS2B-1TD		
	LD601 LD605 LD607 LD609	393 9606 909 393 9543 910 393 9543 907 393 9543 910	SEL6927A(TP5) SLR-325MC (GRN) TAPE SLR-325VC (RED) TAPE SLR-325MC (GRN) TAPE		
RESISTORS GROUP					
	R103 R104 R105 R107 R109	247 2009 983 247 2003 989 247 2018 903 247 2011 942 247 2009 983	RM73B--103JT RM73B--330JT RM73B--0R0KT RM73B--473JT RM73B--103JT		
	R110 R112 R113 R114	247 2003 989 247 2005 903 247 2009 912 247 2009 983	RM73B--330JT RM73B--101JT RM73B--512JT RM73B--103JT		

	Ref. No.	Part No.	Part Name	Remarks	New
	R117	247 2003 989	RM73B--330JT		
	R118	247 2006 960	RM73B--471JT		
	R119	247 2009 983	RM73B--103JT		
	R121	247 2009 912	RM73B--512JT		
	R122	247 2008 968	RM73B--332JT		
	R123	247 2008 913	RM73B--202JT		
	R124	247 2007 943	RM73B--102JT		
	R127	247 2011 942	RM73B--473JT		
	R128	247 2018 903	RM73B--0R0KT		
	R130	247 2009 925	RM73B--562JT		
	R131	247 2013 940	RM73B--334JT		
	R132	247 2011 942	RM73B--473JT		
	R134	247 2003 989	RM73B--330JT		
	R157	247 2005 903	RM73B--101JT		
	R161	247 2003 989	RM73B--330JT		
	R163	247 2018 903	RM73B--0R0KT		
	R164	247 2009 983	RM73B--103JT		
	R166	247 2005 903	RM73B--101JT		
	R169	247 2018 903	RM73B--0R0KT		
	R171	247 2009 925	RM73B--562JT		
	R173	247 2012 925	RM73B--104JT		
	R175	247 2012 912	RM73B--913JT		
	R176	247 2012 983	RM73B--184JT		
	R177	247 2005 903	RM73B--101JT		
	R178	247 2013 937	RM73B--304JT		
	R179	247 2008 939	RM73B--242JT		
	R180	247 2009 912	RM73B--512JT		
	R182	247 2007 943	RM73B--102JT		
	R183	247 2005 903	RM73B--101JT		
	R186	247 2007 943	RM73B--102JT		
	R188	247 2004 920	RM73B--470JT		
	R191	247 2014 965	RM73B--105JT		
	R193	247 2014 965	RM73B--105JT		
	R195	247 2005 903	RM73B--101JT		
	R201	247 2008 968	RM73B--332JT		
	R203	247 2010 972	RM73B--243JT		
	R205	244 2043 937	RS14B3A100JNBST(S)		
	R206	247 2010 927	RM73B--153JT		
	R207	247 2006 986	RM73B--561JT		
	R208	247 2010 927	RM73B--153JT		
	R210	247 2007 943	RM73B--102JT		
	R211	247 2010 985	RM73B--273JT		
	R212	247 2007 943	RM73B--102JT		
	R214	247 2010 985	RM73B--273JT		
	R215	247 2011 900	RM73B--333JT		
	R216	247 2010 927	RM73B--153JT		
	R217	247 2010 969	RM73B--223JT		
	R218	247 2011 926	RM73B--393JT		
	R219	247 2010 927	RM73B--153JT		
	R220	247 2009 925	RM73B--562JT		
	R222	247 2007 943	RM73B--102JT		
	R223	247 2009 925	RM73B--562JT		
	R224	247 2018 903	RM73B--0R0KT		
	R225	247 2012 925	RM73B--104JT		
	R227	247 2009 983	RM73B--103JT		
	R229	247 2012 925	RM73B--104JT		
	R231	247 2009 983	RM73B--103JT		
	R232	247 2012 925	RM73B--104JT		
	R234	247 2008 984	RM73B--392JT		
	R236	247 2009 983	RM73B--103JT		
	R238	247 2001 981	RM73B--4R7KT		



	Ref. No.	Part No.	Part Name	Remarks	New
	R239	247 2011 926	RM73B--393JT		
	R240	247 2008 955	RM73B--302JT		
	R241	247 2007 969	RM73B--122JT		
	R242	247 2006 986	RM73B--561JT		
	R243	247 2018 903	RM73B--0R0KT		
	R244	247 2014 949	RM73B--824JT		
	R245	247 2009 967	RM73B--822JT		
	R247	247 2003 989	RM73B--330JT		
	R248	247 2018 903	RM73B--0R0KT		
	R249	247 2009 941	RM73B--682JT		
	R250	247 2010 956	RM73B--203JT		
	R251	247 2011 997	RM73B--753JT		
	R252	247 2018 903	RM73B--0R0KT		
	R254	247 2018 903	RM73B--0R0KT		
	R255	247 2005 903	RM73B--101JT		
	R256	247 2004 991	RM73B--910JT		
	R259	247 2014 965	RM73B--105JT		
	R264	247 2003 947	RM73B--220JT		
	R265	247 2011 942	RM73B--473JT		
	R267	247 2009 983	RM73B--103JT		
	R275	247 2010 956	RM73B--203JT		
	R276	247 2007 943	RM73B--102JT		
	R277	247 2014 965	RM73B--105JT		
	R278	247 2004 975	RM73B--750JT		
	R279	247 2018 903	RM73B--0R0KT		
	R282	247 2009 925	RM73B--562JT		
	R283	247 2010 901	RM73B--123JT		
	R284	247 2012 925	RM73B--104JT		
	R286	247 2007 943	RM73B--102JT		
	R289	247 2009 983	RM73B--103JT		
	R294	247 2003 989	RM73B--330JT		
	R296	247 2005 945	RM73B--151JT		
	R601	247 2018 903	RM73B--0R0KT		
	R605	247 2009 983	RM73B--103JT		
	R607	247 2006 902	RM73B--331JT (1608)		
	R609	247 2005 987	RM73B--221JT		
	R611	247 2006 902	RM73B--331JT (1608)		
	R613	247 2005 987	RM73B--221JT		
	R615	247 2006 902	RM73B--331JT (1608)		
	R617	247 2007 972	RM73B--132JT		
	RA106	247 9002 909	MNR14=330JE0AB		
	RA115	247 9002 909	MNR14=330JE0AB		
	VR601	211 0908 003	SLIDE VOLUME		
<b>CAPACITORS GROUP</b>					
	C101	257 0512 903	CK73F1E104ZT		
	C102	254 4300 963	CE04W0J101MT(SRE)		
	C103	257 0511 904	CK73F1H103ZT		
	C104	257 0512 903	CK73F1E104ZT		
	C107	254 4533 921	CE04W0J101MT SMG/RE3		
	C108	257 0512 903	CK73F1E104ZT		
	C110	254 4533 921	CE04W0J101MT SMG/RE3		
	C111	257 0512 903	CK73F1E104ZT		
	C112	257 0511 904	CK73F1H103ZT		
	C113	257 0512 903	CK73F1E104ZT		
	C114	254 4536 915	CE04W1A470MT SMG/RE3		
	C115	257 0512 903	CK73F1E104ZT		

	Ref. No.	Part No.	Part Name	Remarks	New
	C117	254 4538 955	CE04W1C221MT SMG/RE3		
	C130	254 4302 958	CE04W1A470MT(SRE)		
	C131	254 4299 964	CE04W1C470MT(SRE)		
	C132	257 0512 903	CK73F1E104ZT		
	C135	257 0512 903	CK73F1E104ZT		
	C136	257 0503 967	CC73CH1H150JT		
	C138	257 0511 904	CK73F1H103ZT		
	C139	254 4300 963	CE04W0J101MT(SRE)		
	C140	257 0511 904	CK73F1H103ZT		
	C141	257 0512 903	CK73F1E104ZT		
	C143	254 4300 989	CE04W0J331MT(SRM)		
	C146	257 0512 903	CK73F1E104ZT		
	C147	257 0511 904	CK73F1H103ZT		
	C148	257 0507 992	CC73CH1H391JT		
	C149	257 0508 917	CC73CH1H471JT		
	C152	257 0506 951	CC73CH1H101JT		
	C154	254 4305 955	CE04W1HR68MT(SRE)		
	C156	257 0512 903	CK73F1E104ZT		
	C157	254 4300 989	CE04W0J331MT(SRM)		
	C158	257 0512 903	CK73F1E104ZT		
	C160	257 0511 904	CK73F1H103ZT		
	C161	257 0512 903	CK73F1E104ZT		
	C169	257 0512 903	CK73F1E104ZT		
	C183	257 0511 904	CK73F1H103ZT		
	C186	257 0512 903	CK73F1E104ZT		
	C201	257 0512 903	CK73F1E104ZT		
	C202	257 0509 929	CK73B1H102KT		
	C203	257 0512 903	CK73F1E104ZT		
	C204	257 0509 929	CK73B1H102KT		
	C205	257 0516 909	CK73B1E223KT		
	C206	257 0512 903	CK73F1E104ZT		
	C207	256 1058 984	CF93A1H124JT (JL)		
	C208	254 4302 958	CE04W1A470MT(SRE)		
	C209	257 0512 903	CK73F1E104ZT		
	C210	254 4300 963	CE04W0J101MT(SRE)		
	C211	257 0512 903	CK73F1E104ZT		
	C215	254 4538 900	CE04W1C100MT SMG/RE3		
	C217	257 0509 990	CK73B1H222KT		
	C221	254 4302 916	CE04W1A100MT(SRE)		
	C222	257 0516 909	CK73B1E223KT		
	C224	257 0512 903	CK73F1E104ZT		
	C227	257 0512 903	CK73F1E104ZT		
	C228	254 4302 958	CE04W1A470MT(SRE)		
	C229	257 0506 935	CC73CH1H820JT		
	C231	254 4302 958	CE04W1A470MT(SRE)		
	C233	254 4300 989	CE04W0J331MT(SRM)		
	C234	257 0512 903	CK73F1E104ZT		
	C236	256 1059 912	CF93A1H224JT (JL)		
	C237	257 0512 903	CK73F1E104ZT		
	C238	257 0501 914	CK73B1H123KT		
	C239	257 0510 947	CK73B1H562KT		
	C240	257 0516 909	CK73B1E223KT		
	C241	257 0501 927	CK73B1H153KT		
	C242	257 0506 948	CC73CH1H910JT		
	C243	257 0512 903	CK73F1E104ZT		
	C244	254 4300 963	CE04W0J101MT(SRE)		
	C245	257 0507 950	CC73CH1H271JT		
	C246	257 0506 993	CC73CH1H151JT		
	C250	257 0512 903	CK73F1E104ZT		
	C251	254 4305 997	CE04W1H3R3MT(SRE)		
	C252	254 4300 963	CE04W0J101MT(SRE)		

	Ref. No.	Part No.	Part Name	Remarks	New
	C253	257 0512 903	CK73F1E104ZT		
	C257	254 4302 916	CE04W1A100MT(SRE)		
	C259	257 0512 903	CK73F1E104ZT		
	C260	257 0509 929	CK73B1H102KT		
	C261	254 4524 956	CE04W1H2R2MT SMG/RE3		
	C263	257 0507 976	CC73CH1H331JT		
	C267	257 0512 903	CK73F1E104ZT		
	C269	254 4536 928	CE04W1A101MT SMG/RE3		
	C270	257 0501 901	CK73B1H103KT (1608)		
	C271	257 0512 903	CK73F1E104ZT		
	C272	254 4538 926	CE04W1C330MT SMG/RE3		
	C273	257 0501 901	CK73B1H103KT (1608)		
	C274	257 0512 903	CK73F1E104ZT		
	C275	254 4538 900	CE04W1C100MT SMG/RE3		
	C276	257 0501 901	CK73B1H103KT (1608)		
	C277	257 0512 903	CK73F1E104ZT		
	C279	257 0512 903	CK73F1E104ZT		
	C280	254 4300 963	CE04W0J101MT(SRE)		
	C281	257 0513 902	CK73F1A105ZT		
	C282	254 4300 963	CE04W0J101MT(SRE)		
	C283	257 0513 902	CK73F1A105ZT		
	C284	257 0512 903	CK73F1E104ZT		
	C287	254 4538 900	CE04W1C100MT SMG/RE3		
	C289	257 0512 903	CK73F1E104ZT		
	C290	254 4538 900	CE04W1C100MT SMG/RE3		
	C291	257 0512 903	CK73F1E104ZT		
	C293	254 4299 964	CE04W1C470MT(SRE)		
	C294	254 4193 947	CE04W1C101MT (SRA)		
	C295	257 0512 903	CK73F1E104ZT		
	C297	257 0511 904	CK73F1H103ZT		
	C601	257 0512 903	CK73F1E104ZT		
	C603	257 0509 929	CK73B1H102KT		
	C604	257 0512 903	CK73F1E104ZT		
	C605	257 0506 951	CC73CH1H101JT		
	C606	257 0511 920	CK73F1H473ZT		
	C607	254 4302 958	CE04W1A470MT(SRE)		
	C608	257 0512 903	CK73F1E104ZT		
	C611	257 0512 903	CK73F1E104ZT		
<b>OTHER PARTS GROUP</b>					
	CX41	205 0355 046	4P KR CON BASE(L)		
	CX51	205 0343 058	5P CONN.BASE(KR-PH)		
	CX62	205 0343 061	6P CONN.BASE(KR-PH)		
	CX161	205 0892 033	16P FFC BASE (P=1)		
	CX231	205 0880 003	23P FFC CON.BASE		
	CX232	205 0849 044	20P CON BASE(BTMK-S)		
	FB121	235 0106 908	CHIP EMIFIL (21A05)		
	FB123	235 0106 908	CHIP EMIFIL (21A05)		
	FB125	235 0106 908	CHIP EMIFIL (21A05)		
	FB202	235 0106 908	CHIP EMIFIL (21A05)		
	FL601	393 8070 002	FLT (14-MT-35GN)		*
	JK103	204 8672 003	2P PIN JACK (FG)		
	JK201	204 8593 001	1P PIN JACK(OR,NI)		
	JK202	204 8421 005	MINI JACK		

	Ref. No.	Part No.	Part Name	Remarks	New
	S601	212 0352 018	JOG-SHUTTLE		
	S604	212 5604 907	TACT SWITCH-TA(ALPS)		
	S608	212 5604 907	TACT SWITCH-TA(ALPS)		
	S612	212 5604 907	TACT SWITCH-TA(ALPS)		
	S616	212 5604 907	TACT SWITCH-TA(ALPS)		
	S623	212 0410 002	ROTARY ENCODER-JOG		
	T201	231 8063 009	PULSE TRANS		
	X101	399 0880 900	CSTLS32M0X53		
	X102	399 0595 004	X'TAL(8.4672MHZ)		
★		461 1159 003	FL SPACER		*

# POWER SUPPLY UNIT ASS'Y

	Ref. No.	Part No.	Part Name	Remarks	New
<b>SEMICONDUCTORS GROUP</b>					
	IC301	263 0913 905	PST600C TP		
	IC302	262 2813 903	SN74AHCT08PW-EL2		
	IC303	263 1178 901	AN80L18RMS		
	IC308	263 1048 002	BA033T		
	IC309,310	263 0809 006	NJM7805FA(S)		
	IC311	263 0554 005	NJM7905FA		
	IC401	262 2813 903	SN74AHCT08PW-EL2		
	IC402	262 3275 003	TMP86CM47U-4R26		
	IC403	263 0913 905	PST600C TP		
	IC404	263 0809 006	NJM7805FA(S)		
	TR301	272 0083 004	2SB1185(E/F)		
	D302	276 0559 909	DAP202KT146		
	D303	276 0438 949	MA151WK (TAPE)		
	D304	276 0550 908	1SR139-200T-62		
	D305,306	276 0623 000	D3SBA20		
	D307	276 0550 908	1SR139-200T-62		
	D401	276 0559 909	DAP202KT146		
	D402	276 0438 949	MA151WK (TAPE)		
	ZD301	276 0760 921	MTZJ4.3B T77		
	ZD302	276 0762 916	MTZJ27B T77		
	LD301,302	393 9627 904	SEL1410E(TP3)		
	LD303	393 9543 907	SLR-325VC (RED) TAPE		
<b>RESISTORS GROUP</b>					
	R301	247 2006 915	RM73B--271JT		
	R302	247 2007 943	RM73B--102JT		
	R303	247 2018 903	RM73B--0R0KT		
	R307	247 2009 983	RM73B--103JT		
	R308	247 2003 947	RM73B--220JT		
	R309	247 2007 943	RM73B--102JT		
	R310	247 2003 947	RM73B--220JT		
	R311	247 2010 985	RM73B--273JT		
	R312	247 2008 942	RM73B--272JT		
	R313,314	247 2009 983	RM73B--103JT		
	R318,319	247 2006 962	RM73B--680JT		
	R320	247 2005 903	RM73B--101JT (1608)		
	R401,402	247 2007 943	RM73B--102JT		
	R403,404	247 2003 947	RM73B--220JT		
	R405,406	247 2018 903	RM73B--0R0KT		
	R407,408	247 2003 947	RM73B--220JT		
	R409	247 2009 983	RM73B--103JT		
	R410,411	247 2003 947	RM73B--220JT		
	R412	247 2018 903	RM73B--0R0KT		
	R413	247 2007 943	RM73B--102JT		
	R414	247 2003 947	RM73B--220JT		
	R415	247 2007 943	RM73B--102JT		
	R416	247 2003 947	RM73B--220JT		
	R419	247 2007 943	RM73B--102JT		
	R420,421	247 2003 947	RM73B--220JT		
	R422	247 2007 943	RM73B--102JT		
	R425-428	247 2009 983	RM73B--103JT		

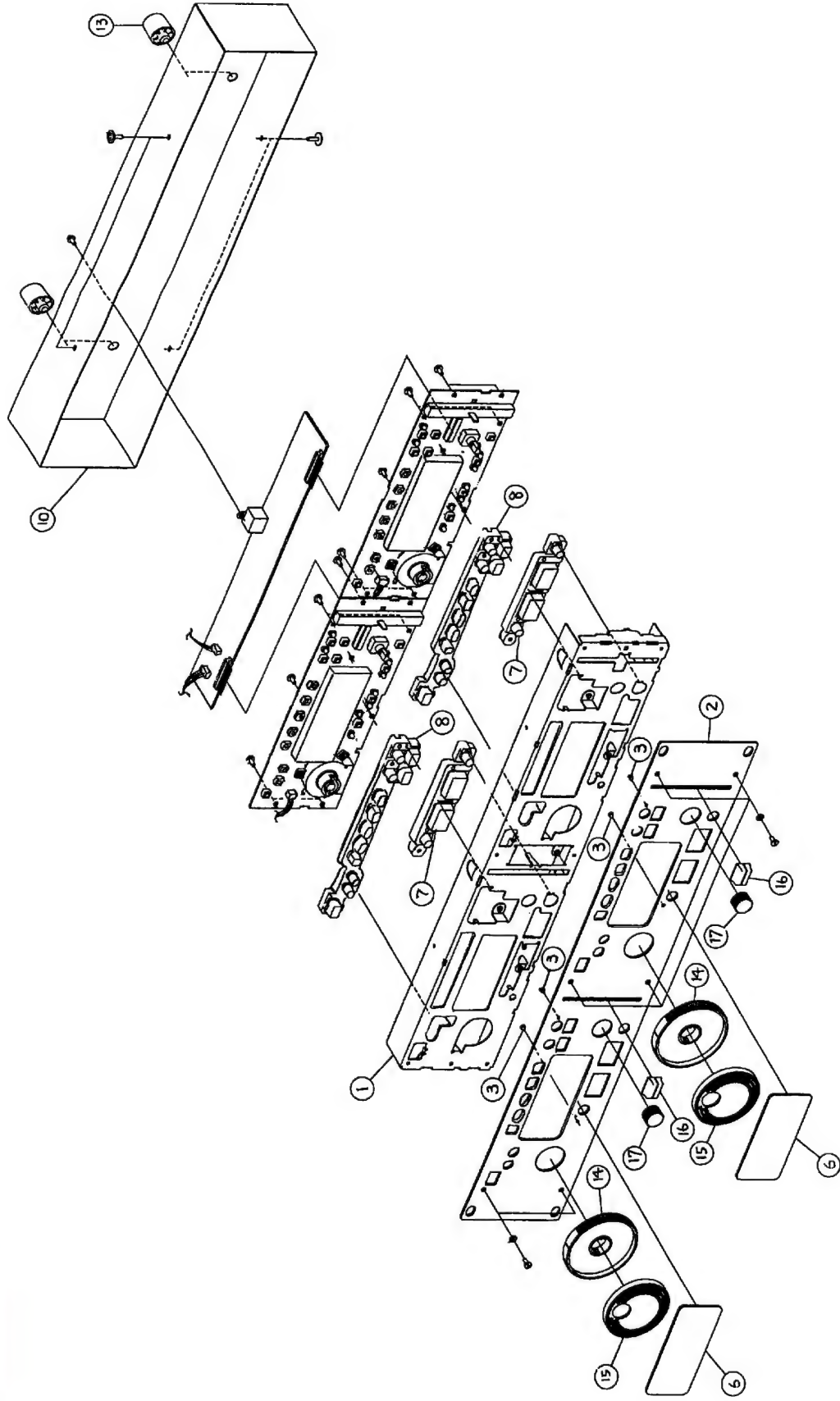
	Ref. No.	Part No.	Part Name	Remarks	New
	R429 R430-439 R441-449 R458	247 2006 915 247 2009 983 247 2009 983 247 2009 983	RM73B--271JT RM73B--103JT RM73B--103JT RM73B--103JT		
<b>CAPACITORS GROUP</b>					
	C301-310	257 0512 903	CK73F1E104ZT		
	C311 C312 C313 C314 C315	254 4536 944 257 0509 929 257 0512 903 254 4538 942 257 0512 903	CE04W1A331MT SMG/RE3 CK73B1H102KT CK73F1E104ZT CE04W1C101MT SMG/RE3 CK73F1E104ZT		
	C316 C317-320 C322 C323-327 C328	254 4535 929 257 0512 903 257 0512 903 254 4536 931 254 4538 955	CE04W1J470MT SMG/RE3 CK73F1E104ZT CK73F1E104ZT CE04W1A221MT SMG/RE3 CE04W1C221MT SMG/RE3		
	C329 C331-335 C336 C337,338 C343	254 4540 707 257 0512 903 254 4442 711 254 4539 718 253 8022 707	CE04W1J331MC SMG/RE3 CK73F1E104ZT CE04W1C103MC(SMG) CE04W1C222MC SMG/RE3 CK45F2EAC103MC		
	C344,345 C346 C401 C402 C403	257 0512 903 254 4541 942 257 0512 903 257 0501 901 257 0509 929	CK73F1E104ZT CE04W1E101MT SMG/RE3 CK73F1E104ZT CK73B1H103KT (1608) CK73B1H102KT		
	C404 C405 C406 C407-410 C412	254 4536 931 257 0512 903 254 4302 958 257 0512 903 254 4538 955	CE04W1A221MT SMG/RE3 CK73F1E104ZT CE04W1A470MT(SRE) CK73F1E104ZT CE04W1C221MT SMG/RE3		
	C413,414 C415 C416 C611 C612,613	257 0512 903 254 4536 931 257 0512 903 254 4536 931 257 0512 903	CK73F1E104ZT CE04W1A221MT SMG/RE3 CK73F1E104ZT CE04W1A221MT SMG/RE3 CK73F1E104ZT		
<b>OTHER PARTS GROUP</b>					
	CW41 CW42 CW201 CW231	203 6369 027 205 0343 045 205 0850 046 205 0880 003	4P KR-DA CONN CORD 4P CONN.BASE(KR-PH) 20P CON BASE(BTMK-P) 23P FFC CON.BASE		
	CX111  CY21 CY41 CY42	205 1135 003  205 0581 001 203 6369 027 205 0343 045	8P MD BASE (F-S)  2P VH CONNECTOR BASE 4P KR-DA CONN CORD 4P CONN.BASE(KR-PH)		
	CY111 CY201 CY231	205 1135 003 205 0850 046 205 0880 003	8P MD BASE (F-S) 20P CON BASE(BTMK-P) 23P FFC CON.BASE		
⚠	F601	206 1087 057	FUSE (ET0.4A)	E3	
⚠		206 1087 031	FUSE (ET0.25A)	E2	

	Ref. No.	Part No.	Part Name	Remarks	New
	FH305,306	202 0040 909	FUSE CLIP (TAPE)		
	L301	235 0159 007	PLH10AN3711ROP2B		
	S301	212 1176 015	POWER SWITCH(TV-5)		
	S302,303	212 5604 907	TACT SWITCH-TA(ALPS)		
	X401	399 0805 901	CSTLS16M0X53-A0		
★ ★		513 3904 007 GEN6256-1	THERMAL LABEL(5X23) FUSE LABEL SUB ASS'Y	E2	



# EXPLODED VIEW OF REMOTE CONTROL UNIT

## Parts List




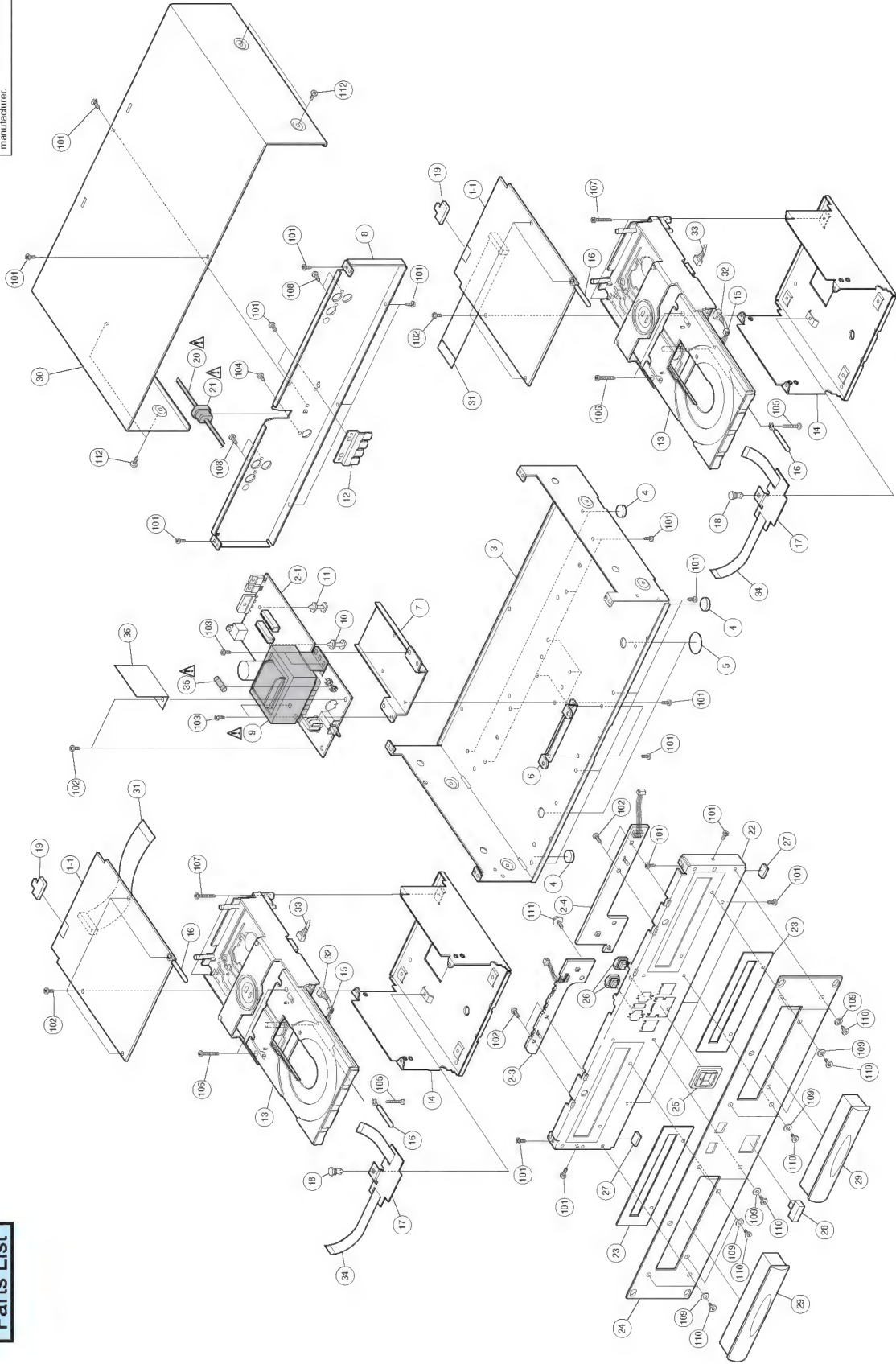
## PARTS LIST OF EXPLODED VIEW (REMOTE CONTROL UNIT)

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	1	441 1984 009	RC FRONT SUB PANEL		1	*
	2	144 2832 107	RC FRONT PANEL		1	*
	3	143 1072 004	LENS		4	
	4	475 1178 009	3W-B		6	
	6	146 2312 005	WINDOW		2	*
	7	119 0122 101	R.KEY (PLAY/PAUSE)		2	*
	8	119 0121 102	R.KEY (FUNCTION)		2	*
	10	105 1350 119	COVER		1	*
	13	104 0270 006	FOOT		4	
	14	112 0910 105	SHUTTLE RING		2	*
	15	112 0911 104	JOG DIAL		2	*
	16	113 1840 206	SLIDE KNOB		2	
	17	112 0820 017	KNOB (MARU)		2	
★		203 6407 031	4P KR-KR CON CORD		1	
★		203 6407 044	4P KR-KR CON CORD		1	
<b>SCREWS</b>						
	5	471 9050 020	3X6 FHHS MFZNII-B		6	
	9	473 7002 005	3X6 CBTS(S)-Z		20	
	11	471 8010 113	SPECIAL SCREW		4	
	12	471 1832 000	M3-SEMS SCREW(6W)		1	


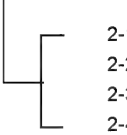
# EXPLODED VIEW OF CHASSIS AND CABINET

Parts List

**WARNING:**  
Parts marked with this symbol  have critical characteristics.  
Use ONLY replacement parts recommended by the manufacturer.

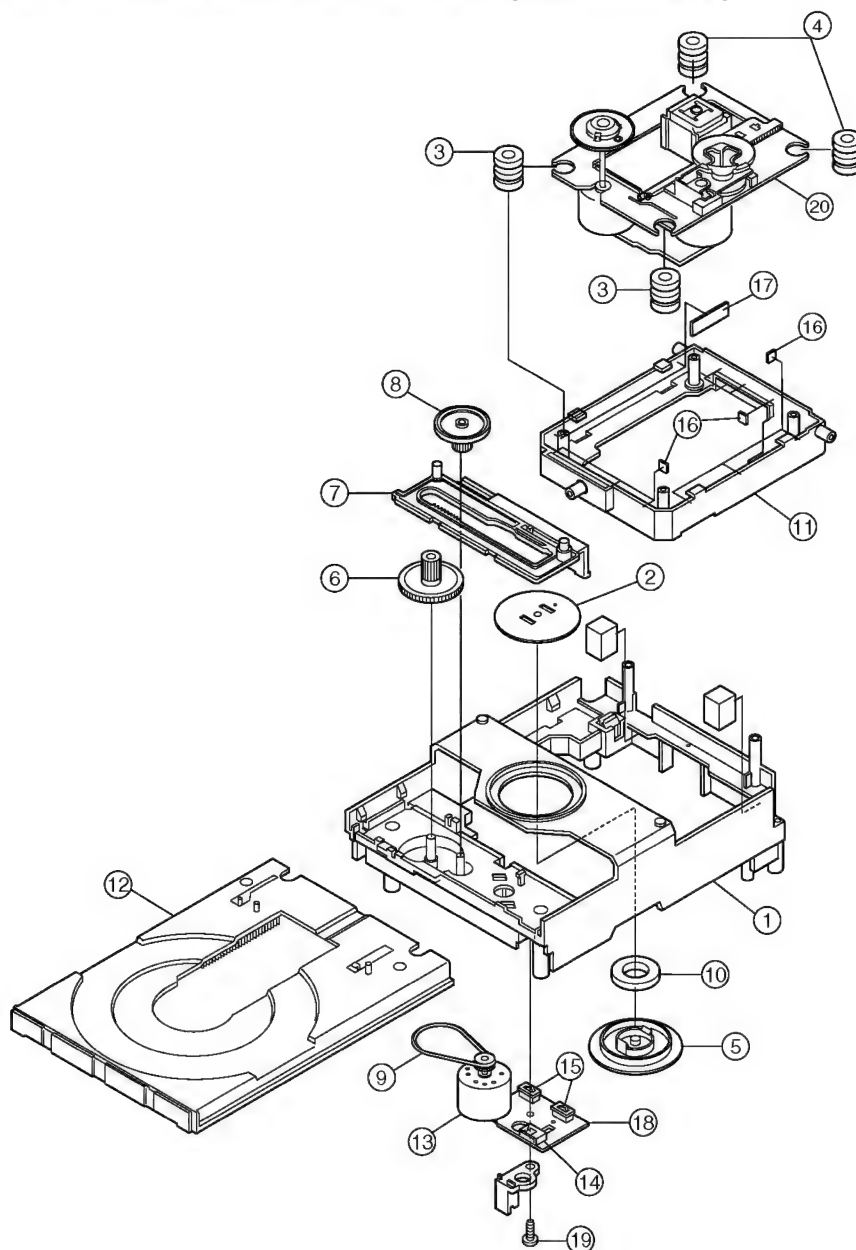


## PARTS LIST OF EXPLODED VIEW (CHASSIS AND CABINET)

	.....	.....	.....	.....	Qty	.....
		1 GU-3523 1-1 1-2 2 GU-3524	DRIVE P.W.B. UNIT DRIVE P.W.B. UNIT PANEL UNIT POWER SUPPLY UNIT	  for RC unit E3	2 - - 1	
		GU-3524A 2-1 2-2 2-3 2-4	POWER SUPPLY UNIT POWER UNIT CPU UNIT LED 1 UNIT LED 2 UNIT	E2, E2K for RC unit	1 - - - -	
		3 411 2033 000 4 461 0706 127 5 513 3175 001 6 412 4921 003 7 412 4343 102	CHASSIS FOOT SHEET BLIND LABEL PWB BRACKET TRANS BRACKET		1 2 2 1 1	*     
⚠		8 105 1431 009 8 105 1431 012 9 233 6452 003 10 412 2814 057 11 412 2814 086	BACK PANEL BACK PANEL POWER TRANS CARD SPACER (L=12) CARD SPACER (L=14.8)	E3 E2, E2K	1 1 1 1 1	  *   
		12 412 9371 001 13 337 0100 006 14 412 5028 109 15 445 0033 005 16 445 8028 009	SPRING PLATE CD MECHA(CD11FTA3N) MECHA BRACKET WIRE CLAMP BAND CORD HOLDER		1 2 2 2 4	  *   
⚠		17 461 1153 009 18 479 0003 025 19 441 1985 008 20 206 2155 001 20 206 2089 106	FFC COVER PUSH RIVET HARD GASKET AC CORD W/CON.E3 AC CORD W/CON.E2	   E3 E2	2 2 2 1 1	*  *  
⚠		20 206 2178 004 21 445 0084 009 21 445 0056 008 22 441 1983 000 23 415 0910 004	KOREA AC CORD VH CORD BUSH CORD BUSH FRONT SUB PANEL BLIND SHEET	E2K E3 E2, E2K	1 1 1 1 2	   * *
		24 144 2831 108 25 146 2275 003 26 119 0096 004 27 461 0740 002 28 113 1689 001	FRONT PANEL P.SW KNOB GUIDE ASSY RUBBER KEY (C) SHEET P.SW KNOB		1 1 2 2 1	*     
		29 146 2311 006 30 102 0663 002 31 009 0143 032 32 203 8305 047 33 204 0307 062	LOADER PANEL TOP COVER 23P FFC CABLE 5P KR-KR CON.CORD 6P KR-KR CON CORD	   CX51 CX62	2 1 2 2 2	* *    
⚠		34 009 0241 031 35 206 1087 057 35 206 1087 031 36 461 1161 004 109 475 1178 009	16P FFC CABLE FUSE (ET0.4A) FUSE (ET0.25A) PROTECT COVER 3W-B	CX161 E3 F601 E2, E2K F601 E3	2 1 1 1 12	     
★		513 3826 004 415 0790 075 445 0033 005 GEN6335 GEN6356	E2 LASER CAUTION UL TUBE (14.3) BK WIRE CLAMP BAND R.SHEET E3 SUB ASS'Y R.SHEET E2 SUB ASS'Y	E2, E2K E2, E2K E2, E2K E3 E2, E2K	2 1 1 1 1	     
★		513 3564 007	RATING LABEL BASE		1	

	.....	.....	.....	.....	Qty	.....
★		513 3326 009	BAR CODE LABEL FILM		1	
★		GEN6154	MANUFAC.DATE SUB ASS	E3	1	
SCREWS						
	101	473 7015 018	3X8 CBTS (S)-B		30	
	102	473 7002 005	3X6 CBTS(S)-Z		14	
	103	473 7004 003	4X8 CBTS (S)-Z		4	
	104	471 3303 029	3X6 CBS-B		1	
	105	473 7508 017	3X10 CBTS (P)-B		2	
	106	473 7032 004	3X25 CPTS(S)-Z		4	
	107	473 7033 003	3X32 CBTS-S (B)		4	*
	108	477 0064 107	FIXING SCREW		4	
	110	471 9050 020	3X6 FHHS MFZNII-B		12	
	111	471 8010 100	SPECIAL SCREW		1	
	112	477 0263 005	3P. SWELLING SCREW		4	

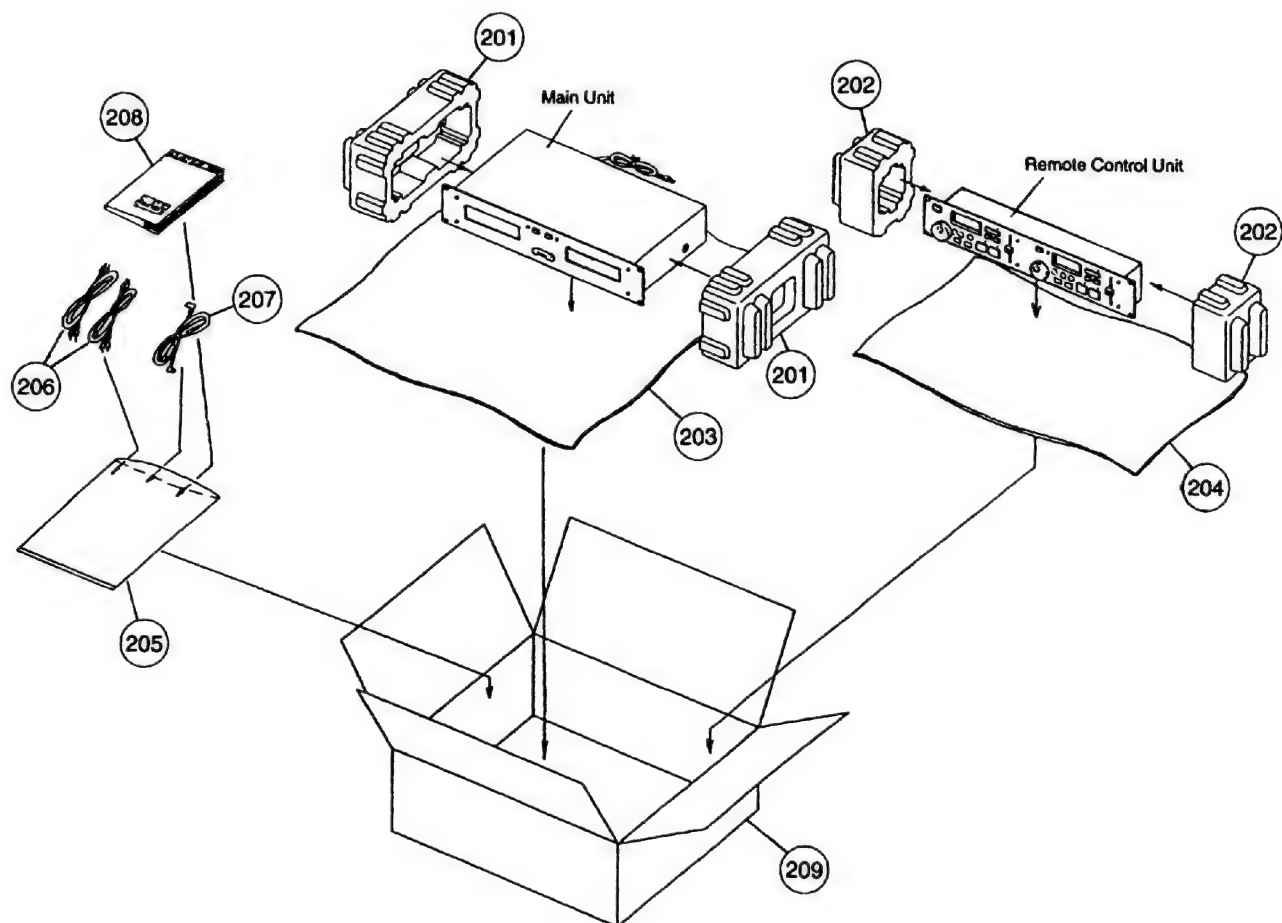
## EXPLODED VIEW OF CD MECHANISM UNIT (CD11FTA3N)



## PARTS LIST OF CD MECHANISM UNIT

Ref. No.	Part No.	Part Name	Remarks	Q'ty	Ref. No.	Part No.	Part Name	Remarks	Q'ty
1	964 0009 006	Frame chassis		1	11	964 0010 008	Mecha lifter		1
2	964 0009 103	Magnet plate		1	12	964 0010 105	Loading table		1
3	964 0009 200	Rubber cushion		2	13	964 0010 901	Loading motor		1
4	964 0009 307	Rubber cushion		2	14	964 0010 202	5P Plug		1
5	964 0009 404	Magnet holder		1	15	964 0010 309	Push switch 2-1		2
6	964 0009 501	Drive gear		1	16	964 0010 406	Cushion		9
7	964 0009 608	Slide gear		1	17	964 0010 503	Cushion		2
8	964 0009 705	Pulley gear		1	18	964 0010 600	Motor P.W.B.		2
9	964 0009 802	Square belt		1	19	964 0010 707	Screw 3×8 SCR S-TPG BIN		1
10	964 0009 909	Magnet		1	20	964 0011 007	Mecha DA11T3CN		1

## PACKING VIEW



## PARTS LIST OF PACKING & ACCESSORIES

.....  
 .....  
 .....

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	201	503 1001 507	CUSHION		2	
	202	503 1010 404	CUSHION (RC)		2	
	203	505 0102 092	STYLEN PAPER		1	
	204	505 0102 021	STYLEN PAPER		1	
	205	505 0038 030	POLY COVER		1	
	206	203 2360 004	2P PIN CORD		2	
	207	204 2869 016	8P MD CON.CORD(L)		1	*
	208	511 4031 009	INST. MANUAL		1	
	209	501 2237 002	CARTON CASE		1	
★		515 0945 007	WARRANTY (COM.)	E3	1	
★		515 0923 207	S.S.LIST COM.(EX)		1	
★		-	CONT.CARD(L)		1	
★		-	BAR CODE LABEL		1	



[illegible]

## NOTE FOR SCHEMATIC DIAGRAM

### WARNING:

Parts marked with this symbol  $\triangle$  have critical characteristics.

Use ONLY replacement parts recommended by the manufacturer.

### CAUTION:

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is defective.

### WARNING:

DO NOT return the unit to the customer until the problem is located and corrected.

### NOTICE

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM

M=1,000,000 OHM

ALL CAPACITANCE VALUES IN MICRO FARAD.

P=MICRO-MICRO FARAD

EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT CONDITION.

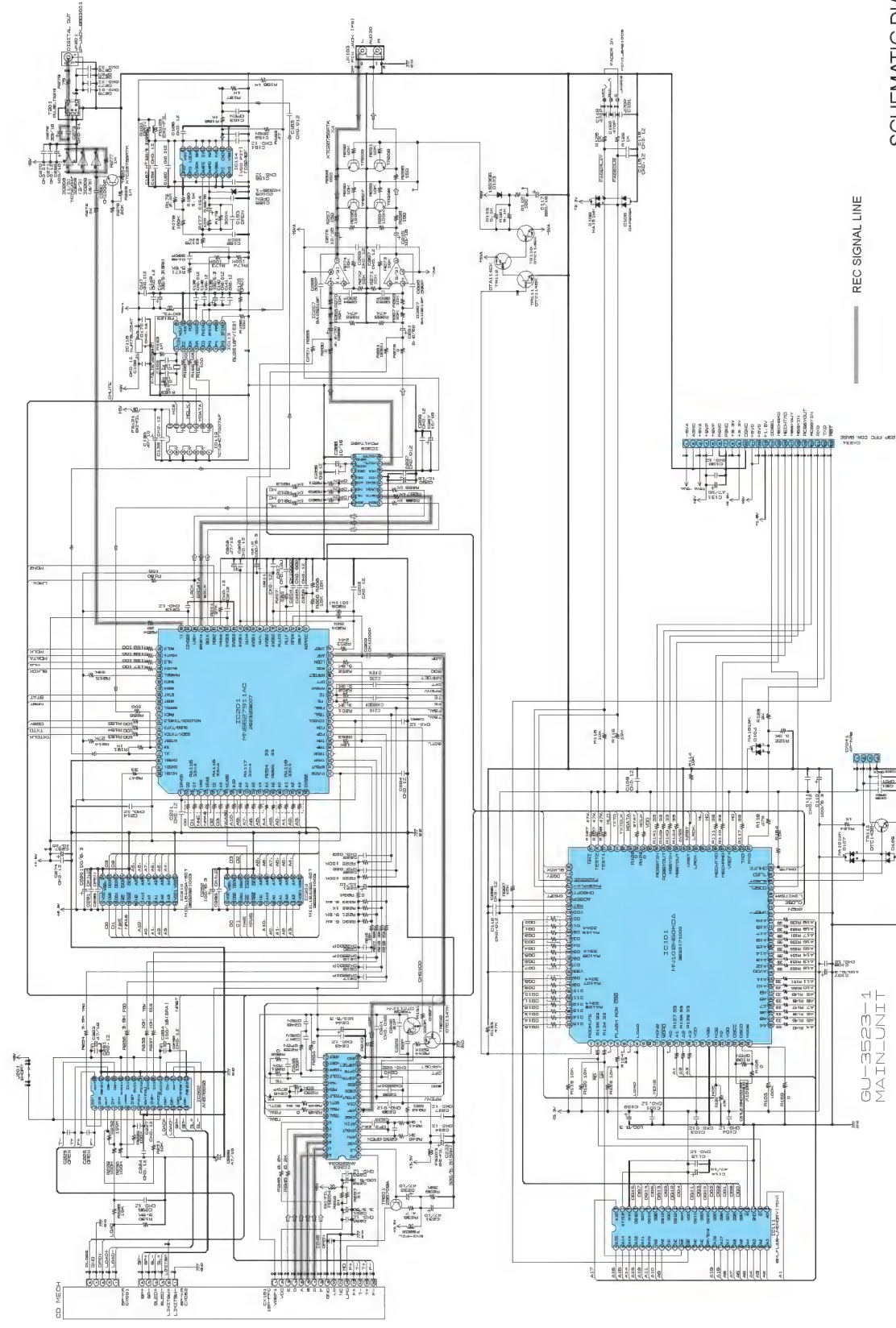
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

## 配線図について

$\triangle$  印の部品は安全を維持するために重要な部品です。  
従って交換時は必ず指定の部品を使用してください。

- 注) 1. 指定なき抵抗値は、kはk、MはMを示す。  
2. 指定なきコンデンサーの値は $\mu$ F、pはpFを示す。  
3. 各部の電圧は無信号の値を示す。  
4. この配線図は基本配線図です。改良等のため変更することがありますのでご了承ください。

### SCHEMATIC DIAGRAMS (1/3)



SCHEMATIC DIAGRAMS (2/3)

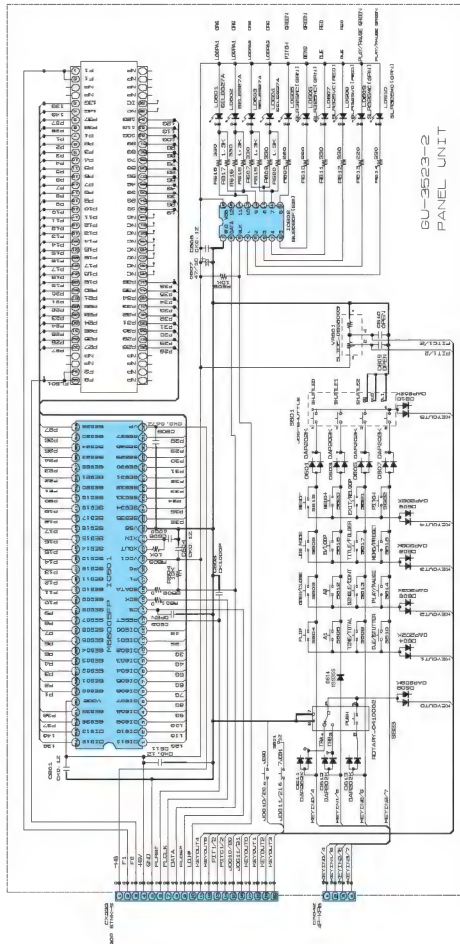
A

B

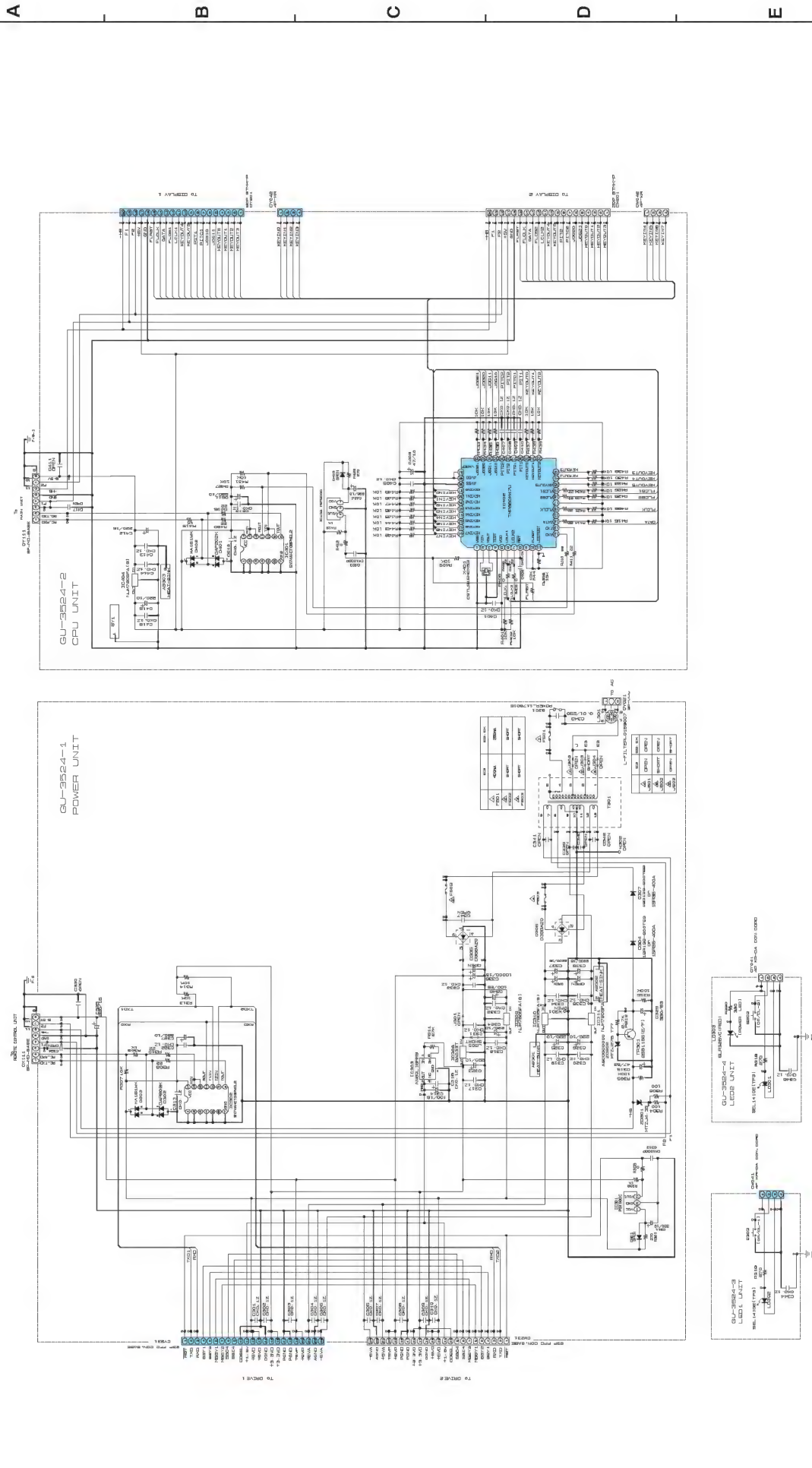
C

D

E



# SCHEMATIC DIAGRAMS (3/3)



SCHEMATIC DIAGRAMS (3/3)

- GU-3524-1
- GU-3524-2
- GU-3524-3
- GU-3524-4

## IMPORTANT - PLEASE READ

### Terms and Conditions of End-User License Agreement

The software upgrade program for model DN-D4000 provided herewith (the "Software") is proprietary to DENON, Ltd. ("DENON") and has been made available to you only in accordance with and subject to the terms and conditions of this License Agreement. By installing or using the Software, you will be confirming your acceptance of the Software and your agreement to be bound by all of the following terms and conditions, including, without limitation, the disclaimers which are a part thereof:

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2. **Limited Rights of Use.**  
This License only allows you to use the Software for your own internal purposes and solely in connection with Denon's DN-D4000 dual CD player (the "Product").
3. **Non-Disclosure.**  
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The terms and conditions of this License Agreement shall be governed by and construed in accordance with the law of the State of Illinois. Any claims, actions or proceedings relating to this License Agreement or the enforcement hereof shall be brought in the courts of the State of Illinois or Federal courts located in the State of Illinois, and you waive any objection to the jurisdiction of such courts.
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## DN-D4000 Plug In Procedure

Please read these instructions several times before performing the actual procedure.

### Step 1: CD-R/RW Creation

1. You should have already downloaded files to a folder of your choice at this point.  
*Example: (C:\D4000 or Desktop)*
2. Launch your disc burning software. (Roxio, Nero..etc)
3. Within your software options, select to make a **DATA disc**. (*Not Audio!*)
4. Go to the properties of your burner software and find the **ISO9660** format setting. Refer to our "Software Burning Guide" on page 6 & 7 or contact your software provider *if* you cannot find it.  
(*You must find and select ISO9660 or the procedure will fail*)
5. Go to the properties of your burner software and find the **MODE/LEVEL** setting. In most cases, they are referred to as, **MODE 1/LEVEL1 CD-ROM**. Refer to our "Software Burning Guide" on page 6 & 7 or contact your software provider *if* you cannot find it.  
(*You must find and select MODE 1/LEVEL1 CD-ROM or the procedure will fail*)



**Note:** If you are using Windows XP "drag and drop" to burn your disc, the procedure will fail. Windows XP does not give you the option to select, **ISO9660** or **MODE/LEVEL 1**.  
\*You must use third party software such as, Roxio/Easy Creator, Nero...etc.

6. Locate the **.bin** file (V4K\_6832.bin) from where you initially saved it on your PC.
7. Drag and drop the (1) **.bin** file into your burners software project window.



The **.bin** file (listed above) should be the **ONLY** selected file to be recorded.  
Please verify before continuing to # 8.

8. Finalize the CD-R/RW at the slowest possible recording speed.  
(*You must finalize/close the disc or the procedure will fail*)  
If you're not sure of what you are doing, please use a CD-RW disc so you can erase it and start over.
9. Take the finalized disc over to the DN-D4000 and go to Step 2.





## Step 2: Uploading the System Software

1. Turn the power **ON** for the DN-D4000 and remove all discs
2. Take the *DATA* disc you've just made, load it into **drive 1** and close the drawer.
3. Once the disc has been identified, the following will be displayed:



### Note:

\*If you see "**disc error**" in the display, chances are the *DATA* disc was not burned properly as described in Step 1. \*See pages 4 & 5 for additional help.

4. Push the **PLAY** button on **drive 1**  
\*The display will proceed to count upward and the green tray LED will start to flash  
\*The left drawer will automatically open when completed



### Warning:

\*Do not turn the power off during this wait period or else your machine will become inoperable and require factory service.

5. Move the *DATA* disc over to the right drive and close the drawer for drive 2.  
\*Leave the drawer open for drive 1
6. Press the **PLAY** button on right drive when indicated.  
\*The right drawer will automatically open when completed
7. Remove the *DATA* disc from the right drive.
8. Shut the power **OFF**, then back **ON** and close both drawers.
9. Verify your software by pressing the **PRESET** button (on either side) for more than 1 sec. In **PRESET** mode turn the track knob counter clockwise until you see "SysVer6832".

# DN-D4000 PLUG IN'S OPERATING INSTRUCTIONS



## New & Current Plug In's as of 10/2004 (6832)

- Seamless Looping and Hot Start accuracy was improved
- Remain Time default was not being saved in the preset mode, now corrected
- *Previous Plug In's listed on page 5 Are Also Included*

Hey DJ's! Did you check out our latest **DN-D6000** YET?

DoubleCD/MP3 Player Comparison Chart

Model Name	DENON	
	DND4000	DND6000
Loading Type	Tray	<b>Slot in</b>
Remote Size	2U	<b>3U</b>
MP3 Playback	Yes	Yes
MP3 Playback	Yes	Yes
<b>MP3 Looping</b>	No	<b>Yes</b>
<b>MP3 Hot Starts</b>	No	<b>Yes</b>
<b>MP3/CD Scratching</b>	No	<b>Yes</b>
<b>File Search System</b>	No	<b>Yes</b>
MP3 ID3-tag Display	Yes	Yes
MP3 File Name Display	Yes	Yes
CD-TEXT	Yes	Yes
<b>Next Track Reserve with Crossfade</b>	No	<b>Yes</b>
CD Seamless looping	Yes(2)	Yes(2)
CD Hot Starts	Yes(2)	Yes(2)
<b>Sampler(time/sec)</b>	No	<b>Yes(15)</b>
<b>Key Adjust</b>	No	<b>Yes</b>
<b>On-Board DSP Effects</b>	No	<b>Yes(7)</b>
<b>Auto BPM</b>	No	<b>Yes</b>
MEMO	Yes(300)	<b>Yes(1000)</b>
<b>Custom Paper Slipmats</b>	No	<b>Yes</b>

For more information about the DN-D6000, check out page 8 & 9

# DN-D4000 PLUG IN'S OPERATING INSTRUCTIONS



## Previous Plug In's as of 8-25-03 (SYS 6505)

- **Playback File Limit:**  
The playback limit of 150 MP3 files per disc has been increased to 999 MP3 files per disc. However, the internal "disc memo" capacity of saving 150 files per disc has not changed. Please refer to your owner's manual for "disc memo" operation. \*This applies to MP3 discs only.
- **3-way MP3 display preset selection:**  
Based on how you recorded your MP3 discs, Denon had added a convenient 3-way display option to view file information with or without ID3 Tags. \*This applies to MP3 discs only.

How to use:

Go into your preset mode by holding down the **[preset]** button for more than 1 second in CUE, PAUSE or NO DISC mode. Then turn the **[track]** knob and find **T.Disp All**. Tap "down" on the **[track]** knob once to find **F. Name OFF**. Tap down again to find **Id3Tag OFF**. Tap again to find **T.Disp All**.

Select one of the three best options for you and then tap the **[preset]** button to exit and save.

**T.Disp All** – Each time the **[Title]** button is pressed, the display order will be:  
File -> Folder -> Title -> Artist -> Album -> File... (great for MP3 discs with ID3 Tags)

**F. Name OFF All** – Each time the **[Title]** button is pressed, the display order will be:  
Folder -> Title -> Artist -> Album -> Folder... (great for MP3 discs with ID3 Tags)

**Id3Tag OFF All** – Each time the **[Title]** button is pressed, the display order will be:  
File -> Folder -> File... (great for discs without ID3 Tags)

- **Play Lock:**  
This new user selectable feature will prevent accidental track change during PLAY in "Single Mode".

How to use:

Go into your preset mode by holding down the **[preset]** button for more than 1 second in CUE, PAUSE or NO DISC mode. Then turn the **[track]** knob and find **PlayM.Sing**. Tap "down" on the **[track]** knob until you see **PlayM.Lock**. Tap the preset button to exit and save. You may temporarily turn this function ON or OFF by cycling through the **[Cont./Single]** button. The display will indicate what mode you're in for a brief second each time you press the **[Cont./Single]** button.

## Previous Plug In's as of 6-04-03 (SYS 6490)

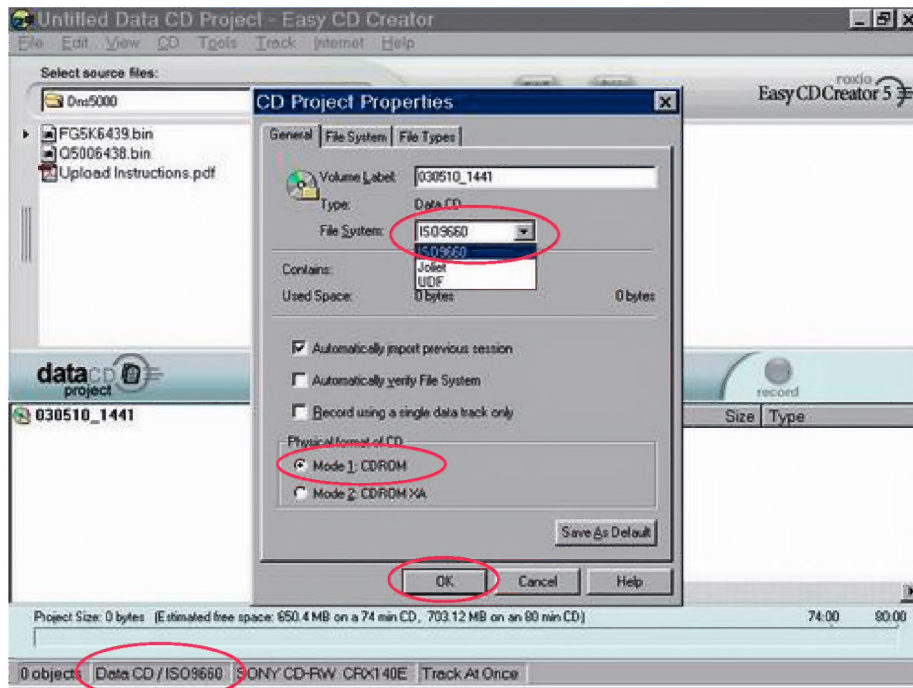
- **Remain Time:**  
MP3 "Remain Time" was added to the current feature set.

# How to properly burn DENON's Plug-In Software to a CD-R/RW

If you are experiencing problems with your upload, chances are you did not select the proper settings within your burning software. The below screen shots are of the two most popular brands that will guide you with these important settings.

**Valid for: DN-D9000, DN-D6000, DN-D4000, DN-S5000, DN-S3000 & DN-S1000**

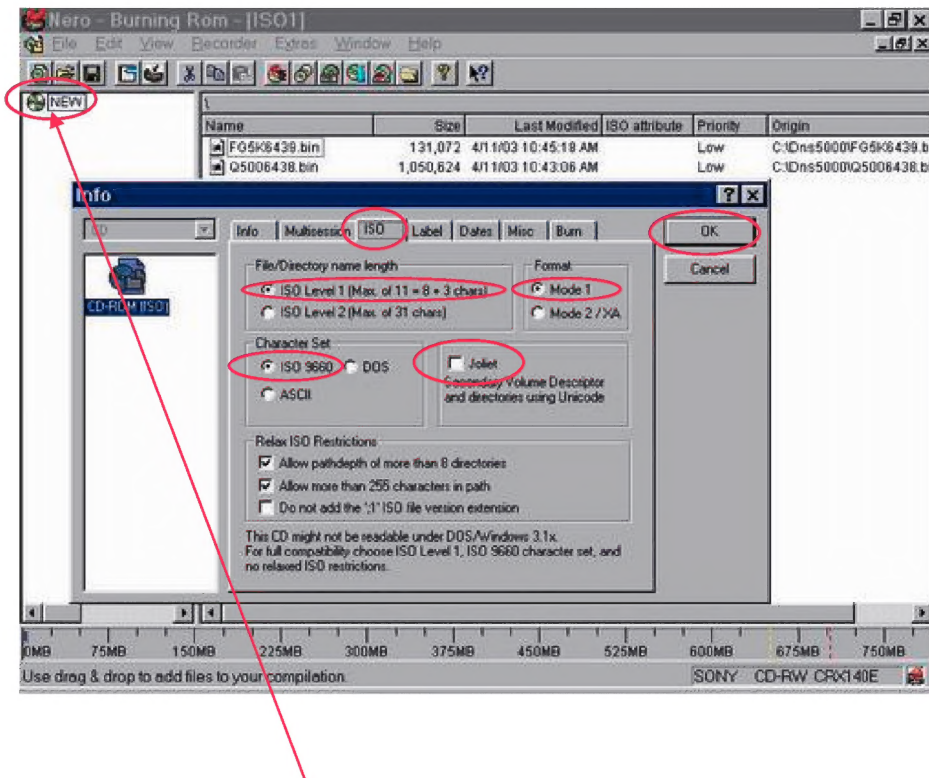
**Roxio – Easy Creator 5** (Select “Classic” for versions above 6)



1. Double click on this setting to change your CD properties.
2. Select “ISO9660” circled in red
3. Select “Mode 1” circled in red
4. Select “OK” circled in red
5. Select the (1) required “.bin” file, then finalize at the slowest possible speed.
6. Read the step-by-step instructions included on page 2 & 3.



## Ahead – Nero



1. Right click on the “NEW” icon and select “Properties” in the drop down menu to change your CD properties. The Info box will then appear.
2. Select the “ISO” tab circled in red
3. Select “ISO Level 1” File/Directory name length circled in red
4. Select “Mode 1” Format circled in red
5. Select “ISO 9660” Character Set circled in red
6. Uncheck the “Joliet” box circled in red
7. Select “OK” circled in red
8. Select the (1) required “.bin” file, then finalize at the slowest possible speed
9. Read the step-by-step instructions included on page 2 & 3.



# DENON

## Professional Dual CD/MP3 Player

# DN-D6000



### Advanced Features

- MP3 Playback: fully supports,
  - MP3 Seamless Looping w/B Point Trim
  - MP3 Scratching
  - MP3 Hot Starts- MP3 Effects
  - C.B.R & V.B.R. encoding up to 320 kbps
  - ID3 Tags, displays: (Title, Artist, Album)
  - MP3 File Search System (locate your files by name fast and easy)

### • Next Track Function w/Cross Fade

Storing hundreds of your favorite mp3's on one disc is great. But what if you want play other files from the same disc back to back? Well, with our world's first Next Track Reserve function, you can search for a song by name and cross fade seamlessly to that file for a smooth non-stop mix.

\* The crossfade time is user adjustable.

\*\* Also available for CD audio discs as well.

### • 15 Second On-Board Sampler, with edit options:

Pitch, B-Trim, Volume control, 3-Way playback (Loop/Single/All)

### • 3-Way BPM Counter

AUTO BPM, Manual TAP and Manual BPM value is also possible.

### • 4 Built-in Effects

You can activate the Effector function by selecting one of the 4 effects: Flanger, Filter (High-Mid-Low), Echo and worlds first Echo/Loop.

### • 3 Platter Effects

Drag-Start, Brake & Reverse effects can be used for MP3 or CD audio discs.

### Other Features

- New Quick Loading *Slot In* Drives

- **Seamless Loop:** Two seamless loops are available. (CD or MP3)

### • Hot Start

Two Hot Starts(A1 and A2) can be made on the fly and used as a stutter point as well. (CD or MP3)

### • Loop End point B Trim/Move

The B point for the seamless loop can be easily adjusted on-the-fly using the Scratch Disc.

- **CD TEXT support** (with scrolling display for long names)

### • Power On Play

Unattended playback is possible upon power up. Great for restaurants, bars and nightclubs at opening time.

### • Relay Play

Unattended playback is possible between both drives. Great for cocktail hour or during dinner time at banquet halls.

### • CD Memo function

Cue point, Playback Pitch & Range, Pitch ON/OFF, Key Adj ON/OFF, and Seamless Loop A and B data can be stored for later recall.

### • 70mm Jog Disc with:

- Scratch Control
- Pitch Bend & Platter Hold
- Scan & Frame Search
- Customizable paper slipmats is possible under the removable clear scratch disc

### • Pitch Control

\* **CD:**  $\pm 4\%$  (0.02% step),  $\pm 10\%$  (0.1% step),  $\pm 16\%$  (0.1% step),  $\pm 24\%$  (0.1% step),  $\pm 50\%$  (0.5% step),  $\pm 100\%$  (1.0% step)

\* **MP3:**  $\pm 4\%$  (0.02% step),  $\pm 10\%$  (0.1% step),  $\pm 16\%$  (0.1% step)

### • Pitch Bend

$\pm 32\%$  (when variable pitch range is  $\pm 4$ , 10, 16 or 24%)

$\pm 99\%$  (when variable pitch range is  $\pm 50, 100\%$ )

### • Key Adjust (=Master Tempo): +100% / -99% max

• **EOM** (Flashes the status time bar when the track is about to end)

• **Shock-Proof Memory:** 20 sec (CD), 100sec.(MP3)

• **Large Fluorescent Tube Display** with Dot Matrix text support

• **2-Way Fast Search/Manual Search** (buttons or jog disc)

### • Quick Jump:

We made searching fast & easy. You can now jump around within a track with precise user adjustable increment time steps.

• **Instant Start** (0.02sec)

• **CD-R/RW Disc Compatible**

• **Fader Start Control terminal** (compatible with all Denon DJ mixers)

### • Digital Outputs

Constant Digital Output at 44.1 kHz is present when using all functions.

• **New remote control cable:** Our newly designed pin less cable is secured in place by its worry free self-locking ends.

• **Software Upgradable** by CD-ROM disc

*\*Design and specifications are subject to change without notice.*

### • Customizable Preset functions

1. AUTO CUE: ON\*/OFF
2. NEXT TRACK FADE TIME: OFF/1/2\*/3 sec.
3. SCRATCH STROKE: Short\*/Long
4. SCRATCH DELAY TIME: OFF\*/Delay1/Delay2/Delay3
5. JUMP TIME: 10\*/20/30/60 sec.
6. PITCH RANGE:  $\pm 4/\pm 10*/\pm 16/\pm 24$  sec.
7. EOM : OFF/10\*/15/20/30/60/90 sec.
8. TOTAL TIME DISPLAY: ON/OFF\*
9. FADER: PLAY/CUE\*/Play/Pause
10. POWER ON PLAY: ON/OFF\*
11. PITCH: Pitch On\*/Key adj On/Pitch Off
12. SINGLE/CONTINUOUS:  
SINGLE/CONTINUOUS/SINGLE PLAY LOCK\*
13. ELAPSED/REMAIN: ELAPSED\*/REMAIN
14. RELAY MODE: Relay ON/Relay OFF\*
15. MEMO ALL CLEAR: YES/NO\*
16. VERSION DISPLAY
17. PRESET CLEAR: YES/NO\*

\* : Default

## Specifications

Type	Dual CD/MP3 Player
Audio Channels	2 channels (Stereo)
Sampling Frequency	44.1 kHz (Normal Pitch)
Frequency Response	20 Hz - 20 kHz
Analog outputs	(1 kHz, 0 dB playback)
Total Harmonic Distortion	0.01%
S/N ratio	95 dB
Channel Separation	85 dB
Transfer and connector	Unbalanced, RCA connector
Output level	2.0 Vrms, 10 kohm
Digital output	
Transfer and connector	Coaxial
Signal format	SPDIF IEC958, Type II
Power supply	AC120 V, 60 Hz
Power Consumption	25 W
Dimensions	
Player unit	482 (W) x 88 (H) x 252 (D) mm 19.0 (W) x 3.5 (H) x 9.9 (D) inch
Remote control unit (RC-D60)	482(W) x 132 (H) x 60 (D) mm 19.0 (W) x 5.2 (H) x 2.4 (D) inch
Weight	
Player unit	6.3 kg, 13.9 lbs
Remote control unit	2.4 kg, 5.3 lbs
Standard Accessories	
Pin connected cord	2 pair
Remote connecting cable	1 pc (3 m, 9.84 ft)

